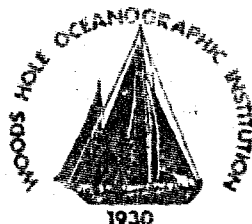
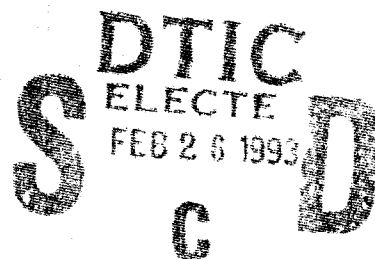




**Woods Hole
Oceanographic
Institution**



**A Trans-Indian Ocean Hydrographic Section at Latitude 32°S
Data Report of RRS *Charles Darwin* Cruise #29**

by

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January 1992

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Technical Report

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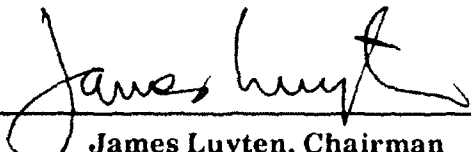

James Luyten, Chairman
Department of Physical Oceanography

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Abstract

A trans-Indian Ocean hydrographic section employing CTD/O₂ profilers was conducted between Africa and Australia during austral spring 1987. The cruise track ranged between 29°S and 34°S; the average latitude of the crossing was 32°S. The purpose of the cruise was to explore various aspects of the South Indian Ocean including the characteristics of the core water masses of this ocean, the strength of the subtropical gyre, the structure and transport of deep western-boundary currents, and the net meridional heat flux. A total of 109 CTD/O₂ profiles with associated rosette water sample measurements and 347 XBT profiles were collected, supplemented by underway upper ocean velocity, bathymetric and sea surface temperature and salinity data. This report details the data collection, calibration, and reduction methods, and summarizes the hydrographic observations.

Introduction

A trans-Indian Ocean hydrographic section along approximate latitude 32°S using Conductivity, Temperature, Depth, Dissolved Oxygen (CTD/O₂) profilers was successfully completed during austral spring 1987. Water samples, collected with a rosette sampler attached to the CTD mounting frame, were analyzed for salinity, oxygen, dissolved nutrients, chlorofluorocarbons (CFC), tritium, and ³He content. The expedition, conducted from the RRS *Charles Darwin*, a NERC (Natural Environment Research Council)/RVS (Research Vessel Services) vessel based out of Great Britain, departed Durban, South Africa on 12 November 1987 and made port at Fremantle, Australia on 17 December 1987. The cruise track covered an area between 29° and 34°11'S; several substantial ridge systems extend across the track, dividing the ocean into distinct basins (Figure 1). The purpose of the cruise was to explore various aspects of the South Indian Ocean circulation including the characteristics of the core water masses of this ocean, the zonal extent of the subtropical gyre including the Agulhas Current and its recirculation zone, and the structure and transport of deep western-boundary currents.

Cruise #29 of the RRS *Charles Darwin* was a multi-institution oceanographic effort. A U.S. contingent of thirteen joined by four shipboard technicians from NERC/RVS (Table 1) collected a total of 109 CTD/O₂ profiles (including test stations #1, 2, and 11). A summary of station information is given in Table 2. The NERC/RVS technicians operated the CTD winch and the permanent shipboard scientific equipment and computers. The Woods Hole Oceanographic Institution (WHOI) CTD Group staged, prepared and maintained the CTD and rosette equipment during the cruise. The WHOI Hydrography Group coordinated sampling and analysis of rosette salinity and oxygen data. WHOI personnel processed, quality controlled, and archived the collected data. A group from Oregon State University (OSU) analyzed water samples for dissolved nutrient concentrations (dissolved silica, phosphate, nitrite, and nitrate). A team from the University of Miami determined chlorofluorocarbon (CFC) concentrations (F11, F12) from selected rosette bottles at sea and also collected samples for subsequent processing in the laboratory of ³H and ³He. Watchstanders deployed 347 expendable bathythermographs (XBTs) along the transect at nominal spacing of 15-20 km between CTD station positions (Table 3). All hands aided in the deployment and recovery of the instruments. Navigation data as well as continuous sea surface temperature, salinity, and upper ocean velocity were logged digitally throughout the cruise; bathymetry data were logged manually at 20-minute intervals with more frequent sampling over abrupt bottom topography. The data return from the cruise was exceptional, and the major cruise objectives were met due to hard work by both the scientific and shipboard personnel during the trip. Listings of the CTD observations at standard levels and the water sample observations form the bulk of this report, Appendix B.

Data Acquisition Systems, Water Sample Analysis, and Instrumentation

Two EG&G/Neil Brown Instrument Systems (NBIS) Mark IIIB CTD/O₂ (Conductivity/Temperature/Depth/Oxygen) profilers (WHOI instruments: #8, serial number 01-2252-01. and #9, serial number 01-2405-01) were employed on the cruise. A detailed description of the instrumentation can be found in the report by Brown and Morrison (1978). A 24-position, 10-liter rosette manufactured by Scripps Institution of Oceanography was the primary system for water sample collection; a 24-position 1.2-liter General Oceanics Inc. rosette system was available as a backup. The 10-liter bottle size was dictated by CFC sampling requirements. A 12-kHz pinger was mounted on each CTD underwater package to facilitate sampling close to the ocean bottom.

The CTD data acquisition system employed the NBIS model 1150 deck unit (Figure 2) which passed digital HEXASCII data to a $\frac{1}{4}$ " Kennedy cartridge tape drive. Data were graphically displayed and listed in real time by an HP-85 computer. Audio tape back-up analog recordings were also collected. Complete back-up sets of acquisition hardware were available on the cruise. Data transcription and processing were performed on Digital Equipment Corporation (DEC) MicroVAX II computer systems (Figure 2). Acquisition data were loaded onto the MicroVAX system via Kennedy cartridge tape drives and displayed graphically using Zeta-8 plotters. Two independent MicroVAX systems were employed: the first devoted to basic processing, the second to data archiving, higher level processing and analysis. Nine-track and DEC TK50 cartridge tapes served as media for data archiving.

Two Guildline AutoSal Model 8400A salinometers were utilized to determine water sample salinities. These were installed in a portable laboratory capable of maintaining constant environmental temperature within $\pm 1^\circ\text{C}$. The nominal laboratory temperature was 22°C . A standardization check was performed once per day, using Standard Seawater Batch P-97. No drift of the Autosal was observed during the cruise, thus no standardization adjustments were made. It should be noted that, based upon a comparison of Batch P-97 and PSS78 DCL Standard, Mantyla (1987) has recommended a correction (which has not been made to these data) of $+ 0.0008$ for rosette samples analyzed with this batch. The uncertainty in the rosette salinity data is believed to be ± 0.003 psu, the manufacturer's stated accuracy of the AutoSal.

Water sample dissolved oxygen analyses were also performed in the constant temperature laboratory using a modified Winkler titration technique. The measurements were conducted on 50 ml aliquots of the samples. A Metrohm Titroprocessor controlling a Metrohm Dosimat was used to titrate to an amperometric endpoint as described by Knapp *et al.* (1989). Standardization checks were performed prior to and following the use of each batch of titrant (typically every third day). No observable drift occurred between standardization checks. These data are reproducible to ± 0.02 ml/l with accuracy of better than 2%.

The inorganic nutrient determinations were carried out by Dr. Louis I. Gordon's group from Oregon State University. Samples were analyzed for dissolved, reactive nutrients at sea using an Alpkem Corporation RFA-300 continuous, segmented flow analyzer (RFA). Nutrients analyzed included orthophosphate, silicic acid, nitrate plus nitrite, and nitrite. The phosphate method was basically that of Atlas *et al.* (1971), modified for the RFA. The remaining methods were those furnished by the Alpkem Corporation for use with the RFA (Alpkem, 1986; Patton, 1983). We have established that all other methods are linear to a few tenths of 1% and give results comparable to, or better than, the AutoAnalyzer-II -based methods we employed in the past (Atlas *et al.*, 1971).

The dissolved nutrients were measured at all station locations; in most cases, these analyses were performed immediately after each CTD cast and were completed within two to three hours after the cast. The short term precision (1 standard deviation), estimated from replicate analysis of the same sample and on occasions where two rosette bottles were tripped at the same depth, was approximately 0.2%, 0.5%, and 1.0% of regional deep water values for silicic acid, nitrate plus nitrite, and phosphate, respectively. Nitrite precision is typically 0.02 micromolar. Due to problems with the autosampler (mentioned below), long term precision and accuracy were estimated at 1-2% for silicic acid and nitrate plus nitrite, 3-5% for phosphate, and 0.04 micromolar for nitrite. Data which seemed clearly in error were rejected during the post cruise quality control review of the data.

Chlorofluorocarbon (CFC) samples (F11 and F12) were drawn from rosette bottles at about 70% of the stations. An analytical system similar to that of Bullister and Weiss (1988) was used. CFC concentrations are reported relative to the SIO86 calibration scale (Weiss, personal communication). A combination bottle and handling blank was used to correct for contamination from the Niskin bottles, and from the collection and storage of samples. This blank was estimated by rotating Niskin bottles, double tripping them and measuring what was believed to be CFC-free water. For F11 the blanks varied throughout the cruise, generally decreasing with time. They ranged from 0.04 pmol/kg to zero. For F12 the blanks were zero; however, contamination problems preclude the use of some of the F12 data. We estimate our precision based on analysis of 166 duplicate samples from the same syringe. The standard deviation of the series of replicates for F11 was as follows: for concentrations in the range zero to 0.10 pmol/kg precision ± 0.004 pmol/kg, in the range 0.1-0.5 pmol/kg precision ± 0.007 pmol/kg, in the range 0.5-1.0 pmol/kg precision ± 0.012 pmol/kg, and greater than 1.0 pmol/kg precision ± 0.092 pmol/kg. The standard deviation of the series of replicates for F12 was as follows: for concentrations in the range zero to 0.10 pmol/kg precision ± 0.009 pmol/kg, in the range 0.1-0.5 pmol/kg precision ± 0.011 pmol/kg, in the range 0.5-1.0 pmol/kg precision ± 0.035 pmol/kg, and greater than 1.0 pmol/kg precision ± 0.04 pmol/kg. Marine air for F11 were 224 ± 6 ppt. The water sample salinity, oxygen, nutrient, and CFC observations are presented in Appendix B of this report.

Samples from stations 12, 15, 26, 33, 35, 39, 44, 50, 55, 62, 65, 69, 80, 88, 94, 97, 105, and 106 were analyzed for the following quantities: tritium, helium isotope ratio, total helium and neon. Two hundred and forty measurements each are available for helium isotope ratio, total helium and neon; there are 130 measurements for tritium.

For the noble gas analyses, water samples (approximately 40 g) were collected in clamped copper tubes. These samples were also used for tritium analyses in the upper 500 m. For deep tritium samples, water samples (1 liter) were collected in glass bottles. Tritium measurements were made using the mass-spectrometric helium-3 regrowth technique with a precision of 0.01 TU. Helium isotope ratios, as well as absolute helium and neon concentrations, were measured mass-spectrometrically. Isotope ratios, expressed in the δ notation (ratio anomaly with respect to the atmosphere), have a precision of 0.2%; absolute concentrations have a precision of 0.25%. These data are presented in listings appearing in Appendix C.

The ship's equipment inventory included an Acoustic Doppler Velocity Profiling (ADCP) system (RD 150-kHz profiler with IBM AT acquisition computer) and a digital expendable bathythermograph (XBT) recorder (Bathysystems, Inc. with HP-85 computer). A thermosalinograph monitored surface temperature and salinity along track; data were logged to the ship's main computer system. This system also recorded navigation information (transit and GPS fixes) from which all CTD station navigation information was updated after the cruise. Wind speed and direction were recorded manually by each watch at the start of each station. All transit fixes were digitally logged in addition to GPS fixes every two minutes when available; all transit fixes were subsequently interpolated to form a one-minute position record using the ship velocity data.

There were relatively few failures of equipment during the cruise. Upon set-up in Durban, CTD #9 was found to have a faulty FSK board, which was quickly identified and replaced before departure. At cruise start, there was a problem with the Scripps-modified General Oceanics rosette unit which was remedied by replacing a faulty pylon unit. The Kennedy Cartridge tape drives employed for acquisition experienced difficulty switching tracks efficiently; stations greater than 3000 db typically lost up to 15 db of data in mid-profile; data were subsequently interpolated across this gap during processing. At the beginning of the cruise, there was a failure of the nutrient RFA's autosampler. This was replaced by an older model autosampler which was only partly compatible with the RFA; this resulted in noisy and erratic phosphate results, particularly during the first third of the cruise. Late in the cruise one MicroVAX II nine-track tape drive failed; the remaining functional unit was shared between computer systems for the rest of the cruise. Several of the rosette bottles suffered breakage, a function of the difficulty handling such a large package. Many of the rosette bottles leaked; the problem was ultimately traced to old O-rings in the bottles. Careful editing has removed all suspect observations from the final data set.

Cruise Narrative

Staging of the ship was accomplished during a four-day period in Durban, South Africa. Two containers, one a WHOI portable laboratory (a temperature controlled, 20-foot long container equipped with salinity and oxygen analysis equipment), the other a shipping container used to transport the cruise equipment, were secured to the deck. CTD and CFC laboratories were established in the RRS *Darwin*'s large main laboratory; two small adjacent laboratories housed the nutrient and shipboard computer operations.

Departure from Durban was several hours late on November 12 due to a delayed air shipment containing the bulk of the University of Miami chemistry equipment. At 2100 hrs, the ship transited to a test station site roughly 100 km off the African coast in 3000 m of water. On the morning of November 13, CTD #9, mounted with the small 1.2-liter rosette package, was successfully deployed (station 1) to within 10 m of the ocean floor. Station 2 (the test station for CTD #8 mounted in the large rosette package) was aborted at 900 m depth when the CTD signal was lost. The remainder of that day was spent troubleshooting the problem. During this time, the scientific party was notified that the ship was required to return to Durban to put ashore the vessel's electrician because of a home emergency. The replacement electrician was scheduled to arrive Durban on the afternoon of the 15th. Complicating matters, the winds had increased to 40 knots with growing seas. Since the large rosette package was not yet functional, it was decided to work westward from the test station site and occupy the coastal stations of the proposed section using CTD #9 in the small, easily handled rosette package. Stations 3 through 10 make up an east-to-west transect back toward the African coast. A successful CTD #8 test station was subsequently occupied off the coast of Durban with the repaired large rosette system. The balance of the CTD casts were done with this underwater rosette package.

The second departure from Durban occurred at 1700 hrs on 15 November. The ship steamed back to re-occupy the easternmost station position already collected (site of stations 1 and 2) and proceeded to work to the east. The CTD station schedule dictated high-resolution sampling at the western sides of basins and across rough topographic relief with an effort to sample any extraordinarily deep trenches. Larger station spacing intervals were planned over abyssal plains. The section began at the western boundary at 31°S where the Agulhas Current is located near the abrupt African shelf break. Stations were closely spaced down to the abyssal plain of the Natal Valley, spanning the full width of the Agulhas Current. The section then crossed the Mozambique Ridge and Basin, and up over the Madagascar Ridge near Walter's Shoal. High resolution stations were made at the eastern flanks of both ridges so as to observe any western intensification of the baroclinic gradients. Next, the cruise track turned slightly south to cross the Southwest Indian Ridge at approximate right angles, before sampling zonally across the Crozet Basin at latitude 34°S. In the eastern Crozet Basin the section jogged northward at the Southeast Indian Ridge to cross that feature at near right angles before sampling across the southern

extremity of the Central Indian Basin along 29°S. The section continued along the crest of Broken Ridge then concluded by sampling across Naturaliste Plateau and up onto the Australian shelf, terminating in 55 m of water midway between Cape Leeuwin and Cape Naturaliste (Figure 1). Upon arrival in Fremantle, gear was packed up into shipping vans within two days and surface freighted via Singapore (RRS *Darwin's* subsequent port of call) to the United States.

During the cruise, the combination of the large underwater package and the slow winch speed (maximum 60 m/min) led to station times exceeding six hours. The first half of the cruise suffered average lowering/raising rates of 37 m/min. Fortunately, good weather afforded us with more time for CTD stations, and less time devoted to repairs; there were a total of five reterminations of the CTD underwater cable during the entire cruise, several of which occurred in poor weather during the last week.

Selection of the primary CTD instrument for the cruise was based on the consistency with which the CTD sensors matched the analyzed water sample salinity data obtained on test stations and the initial casts. CTD #9 was used to collect the first group of stations (3-10) as noted above, while CTD #8 was employed on stations 11-15. Close scrutiny of these early data revealed that the potential temperature/salinity profiles for the two CTD/O₂ instruments differed slightly; considering both instruments with pre-cruise calibrations applied, CTD #9 better described the hydrographic profile outlined by corresponding rosette water sample data. Thus, at station 16, CTD #9 was placed in the large rosette frame and subsequently employed on stations 16-94, and 96-109. CTD #8 was used once more at station 95 in the Western Australian Basin to confirm its deep-water sensor calibrations.

Estimated accuracies of the final processed and calibrated data are $\pm 0.002^{\circ}\text{C}$ for temperature, ± 0.002 for salinity (with respect to the standard sea water used) and $\pm 0.02 \text{ ml/l}$ for dissolved oxygen concentration. The following sections detail the procedures used to reduce the CTD data to final form. All stations were collected to within 10 m of the ocean bottom; the deepest station (#91) extends to 5927 db in the Western Australian Basin. The warmest surface waters ($T = 23.480^{\circ}\text{C}$) were found in the Agulhas Current at station 7; the coldest deep-water temperatures were found at station 50 in the Crozet Basin ($T = 0.517^{\circ}\text{C}$, $\Theta = 0.094^{\circ}\text{C}$).

Calibration of CTD/O₂ Profiles

Overview:

Laboratory calibrations, performed before and after the cruise, provide the sole correction information for the CTD pressure and temperature sensors. Final CTD data have been pressure averaged at 2 db intervals with the appropriate pressure, temperature and conductivity calibrations. Note that temperature and pressure calibrations are used to

scale both the data profiles and the CTD component of the rosette water sample data files. The pre-cruise laboratory calibrations of CTDs #8 and #9 appeared to described the at-sea instrumentation more accurately than post-cruise laboratory calibrations. Extended periods of time elapsed (three months prior, four months post) between CTD calibrations and data acquisition; it is likely that an event during post cruise shipment affected post cruise calibrations for CTD #8. In order to preserve a long-standing history on the stability of these sensors, no electronic adjustments were made to the sensor interface boards during laboratory calibrations. Instead, corrections, determined by polynomial least-square fits to the laboratory calibration data, were applied to the data. Temperature calibrations consisted of quadratic fits to seven temperature points ranging between 0 and 25°C in reference to a platinum thermometer standard (Figure 3). Pressure calibrations were done using a dead-weight tester; data were sampled at 1000 psi intervals with both increasing and decreasing pressure between 0 and 10,000 psi. Data reduction employed a cubic calibration algorithm determined from a least-square fit to these data (Figure 4). Conductivity calibrations were derived using the water sample salinity data which is traceable to the IOS Wormley standard sea water. Additional information on CTD calibration methodology and data processing procedures can be found in the report by Fofonoff, Hayes, and Millard (1974) and Millard (1982).

Pressure:

For both CTD instruments, the pressure bias term applied to each CTD cast was set equal to the pre-lowering deck unit pressure reading (du). The following downcast (0-6000 db range) pressure calibration algorithm was applied to the CTD #8 profiles.

$$\text{CTD \#8: } P = - (du) + (.996485E-1) P_{\text{raw}} + (.204213E-7) P_{\text{raw}}^2 - (.203510E-12) P_{\text{raw}}^3$$

where P_{raw} is the raw counts of the pressure channel.

The downcast pressure calibration algorithm for CTD #9 derived from laboratory measurements is listed below:

$$\text{CTD \#9: } P = - (du) + (.997789E-1) P_{\text{raw}} + (.146634E-7) P_{\text{raw}}^2 - (.199288E-12) P_{\text{raw}}^3$$

This calibration equation was adjusted with a cubic term which increases the pressure of the CTD trace by 15 db at 6000 db but introduces negligible change for $P < 3000$ db. This step was taken to correct a problem with the pressure gauge which resulted in an uncharacteristically salty (.002) CTD trace in the deep water (see Appendix A). The equation for the laboratory pressure calibration plus the adjustment is:

$$\text{CTD \#9: } P = - (du) + (.99934049E-1) P_{\text{raw}} + (.2878124E-8) P_{\text{raw}}^2 + (.229295E-13) P_{\text{raw}}^3$$

In similar fashion, cubic calibration curves were constructed from the decreasing pressure (upcast) laboratory calibration data. For CTD #8, a weighted combination of the pre-cruise downcast and upcast pressure calibrations was applied to the CTD component of the rosette water sample data (Millard, 1982).

CTD #8 :

$$P_{up} = -.661953E1 + (.993626E-1) P_{raw} + (.358650E-7) P_{raw}^2 - (.370163E-12) P_{raw}^3$$

$$P_{dn} = -.408372E1 + (.996485E-1) P_{raw} + (.204213E-7) P_{raw}^2 - (.203510E-12) P_{raw}^3$$

For CTD #9 observations, the upcast pressure calibration algorithm alone (with adjustment described above) was applied to the upcast CTD component of the rosette water sample data. This method of scaling helped minimize discrepancy in the CTD #9 deep-ocean salinity data.

CTD #9 :

$$P_{up} = .296106E1 + (.9946015E-1) P_{raw} + (.2208452E-7) P_{raw}^2 - (.1510815E-12) P_{raw}^3$$

Temperature:

The following pre-cruise temperature calibrations were used for the calibration of CTD downcast and water sample rosette data collected with CTD #8. A time lag correction of 0.250 seconds between the C and T sensors (deduced during the cruise) was also made.

$$\text{CTD \#8: } T = .481378E-2 + (.499839E-3) T_{raw} + (.183211E-11) T_{raw}^2$$

where T_{raw} is the raw counts of the temperature channel.

A comparison of CTD #9 pre- and post-cruise temperature calibrations indicated that the temperature sensor remained very stable during the cruise and shipping time period; therefore, a combination of the two laboratory calibrations was used to determine the correction formula. The following was applied to the data along with a time lag correction of 0.150 seconds:

$$\text{CTD \#9: } T = .993360E-2 + (.499908E-3) T_{raw} + (.120247E-11) T_{raw}^2$$

Conductivity:

Linear conductivity calibration algorithms, derived from pre-cruise laboratory data (Figure 5), were used to plot and list CTD data during acquisition. The algorithms

employed were:

$$\text{CTD \#8: } C = .844399\text{E-2} + (.100041\text{E-2}) C_{\text{raw}} [1 + \alpha (T - T_0) + \beta (P - P_0)]$$

$$\text{CTD \#9: } C = -.148379\text{E-2} + (.100002\text{E-2}) C_{\text{raw}} [1 + \alpha (T - T_0) + \beta (P - P_0)]$$

where:

- C_{raw} is the raw counts of the conductivity channel;
- α is the temperature correction coefficient ($-.65\text{E-5 } ^\circ\text{C}^{-1}$);
- β is the coefficient of cell contraction with pressure (1.5E-8 db^{-1});
- T is scaled temperature;
- T_0 is 2.8°C ;
- P is scaled pressure;
- P_0 is 3000 db.

CTD #8 pre-cruise scaling factors resulted in a huge offset (.01 psu) between the CTD and the rosette water sample salinity data. CTD #9 pre-cruise scaling factors described the CTD conductivity cell extraordinarily well, which motivated use of this instrument on the bulk of the stations. It was not until much later in the cruise that a .002 psu inconsistency between CTD #9 and water sample salinity was revealed at very deep stations. Non-standard manipulations of the pressure and conductivity scaling factors were ultimately needed in order to describe the deep ocean accurately (Appendix A).

The final conductivity calibrations applied to the data were determined from multiple regression fits of the CTD data with their respective rosette salinity water samples. CTD #8 stations were calibrated using standard multiple regression fitting methods for conductivity (Millard, 1982). First, a multiple regression fit was done over a homogeneous station group (one in which the differences between water sample and nominally scaled CTD salinities were roughly constant), fitting for conductivity bias and conductivity slope through the entire water column. The resultant bias was next removed from the data, and a second multiple regression fit for conductivity slope was done for the same station group in the deep water. Stations 2 and 11-15 formed a homogeneous calibration group. Station 95 required an independent fit to its corresponding water sample data. The stations which utilized CTD #8 subsequently required a manual adjustment to bring the CTD downcast salinity trace 0.002 psu fresher for consistency with surrounding casts made with CTD #9 and with the upcast water sample data.

Stations 2, 11-15:

$$C = .16271899\text{E-1} + (.99980617\text{E-3}) C_{\text{raw}} [1 + \alpha (T - T_0) + \beta (P - P_0)]$$

Station 95:

$$C = .11818043E-1 + (.99985533E-3) C_{\text{raw}} [1 + \alpha (T - T_0) + \beta (P - P_0)]$$

CTD #9 conductivity scaling coefficients were derived in essentially the same manner as those for CTD #8. As previously mentioned, a deep-water cubic pressure adjustment was made to the CTD #9 data. In addition, the cell contraction coefficient, β , was set to zero in order to describe the subtle uncharacteristic properties of the CTD #9 conductivity cell. Three calibration groups were identified in the CTD #9 data set; the resulting algorithms that were applied are:

Stations 1-10:

$$C = .12371505E-1 + (.99949753E-3) C_{\text{raw}} [1 + (T - T_0)]$$

Stations 16-80:

$$C = .88715050E-2 + (.99949753E-3) C_{\text{raw}} [1 + \alpha (T - T_0)]$$

Stations 81-109:

$$C = .61719213E-2 + (.99968088E-3) C_{\text{raw}} [1 + \alpha(T - T_0)]$$

Uncertainty in the final CTD salinity data may be measured by differences between CTD and water sample salinity data. Absolute CTD salinity accuracy of course hinges on the accuracy of the water sample data which in turn is tied to the Wormley standard water. Two measures of CTD/water-sample consistency were prepared (Figures 6, 7). The time series plot of salinity differences as a function of station number shows the final data to be uniformly calibrated. The histogram of the salinity differences for the data below 2000 decibars is essentially Gaussian with a mean of 0.0003; the standard deviation of the population of 645 points is 0.0085 psu.

Oxygen:

Coefficients in the CTD oxygen sensor calibration algorithm were derived from *in situ* water sample oxygen data according to Owens and Millard (1985). The algorithm is:

$$\text{Oxm} = \left[\alpha \left(\text{Oc} + \beta \left(\frac{d\text{Oc}}{dt} \right) \right) + C \right] \text{Oxsat}(T,S) e^{D [T + E (T_0 - T)] + F P}$$

where,

Oc	is the oxygen current measurement;
P & T	are CTD pressure (dbar) and temperature (°C);
To	is the oxygen sensor temperature (°C);
S	is salinity computed on the 1978 practical salinity scale;
α	is the oxygen current slope adjustment,
β	is the oxygen sensor lag in seconds; and
C	is the oxygen current bias adjustment.

Parameters D, E, F appearing in the exponential represent adjustments for the permeability of the teflon membrane of the oxygen cell with temperature and pressure. Oxsat(T,S) is the oxygen saturation value as calculated by Weiss (1970).

Stations were first subdivided into groups which appeared to have homogeneous calibration characteristics. A multiple regression technique was then used to define the coefficients. Note that the regression is between downcast CTD oxygen sensor data and water sample observations obtained on the upcast. (This is because erroneous CTD oxygen data are obtained when the underwater package is stopped to close a rosette bottle. As well, the oxygen sensor typically exhibits excessive up-down hysteresis.) Oxygen sensor characteristics changed markedly in time on the trans-Indian cruise. Regression groups were typically small, and frequently consisted of single stations. We have no explanation for the lack of sensor stability. Table 4 details the algorithm coefficients used to generate the final data.

As was the case for the salinity data, a measure of CTD-derived oxygen data uncertainty is given by comparison with the water sample data (Figures 7, 8), but the absolute accuracy depends directly on the water sample accuracy. The population of oxygen difference data below 2000 decibars (678 points) has a standard deviation of 0.037 ml/l with a mean of 0.008 ml/l.

Acoustic Doppler Current Profiler Measurements

Upper ocean velocity profile data from the hull mounted ADCP instrument were vector averaged in 10-minute blocks and archived to floppy disk with the standard RDI software package. A default configuration of 8-m ping length and 8-m bin length was specified, with a ping rate of 1 Hz. As noted above, ship navigation data were recorded on a separate computer. Post-cruise processing of the data initially involved merging these data using time as the common denominator. This entailed correction for a linear drift of 24 seconds/day in the ADCP system time data. The other major correction applied to the data involved determination of the ADCP transducer orientation relative to the ship's gyro. Reciprocal runs of 30–45-minute duration were carried out midway through

the cruise. A study of the resulting data indicates that a transducer rotation angle of 4.9° is appropriate. Work is continuing to refine this estimate.

Representative summary plots of the relative ADCP measurements are given in Figures 9a–d. The top panels in each case denote with bold line the ship position corresponding to each subset of the data shown. The 10-minute average east and north relative velocity profiles are displayed in “waterfall” format in the middle panels. The bottom panels present the time series of depth-averaged relative velocity (east is the bold curve). As is apparent from the figures, the ADCP velocity profiles are characterized by structures with short vertical scales, having small horizontal scale. Table 5 presents estimates of the ADCP-derived absolute across-track velocity averaged horizontally between CTD stations, and in the vertical between 100 and 200 m. For comparison, the table also shows the differences between the ADCP data and the geostrophic velocity relative to 1500 db averaged over the same vertical interval. There is qualitative agreement between ADCP and geostrophic velocities; mean and standard deviation of the difference between them are 1.729 E-2 m/s and 8.035 E-2 m/s , respectively. Understanding the sources of these differences is an ongoing research topic.

Summary Presentations of the Final Data Set

As noted in the introduction, the bathymetry of the South Indian Ocean is quite complex. To a large degree, the water property characteristics on the RRS *Darwin* trans-Indian section reflect the underlying bathymetry; significant property differences are seen from basin to basin. As a means of summarizing the observations, potential temperature–property diagrams were constructed from selected stations in each of the major basins sampled on the cruise (Figures 10–21).

Six property *vs.* depth sections (Figures 22–27) of the trans-Indian Ocean section were prepared. Vertical distortion of the full-depth profiles is 500 : 1, while the expanded shallow sections have a vertical distortion of 1250 : 1. The continuous bottom topography shown on these profiles is based on depth recordings made approximately every 20 minutes when the ship was underway. Depths have been corrected for variations in the speed of sound in seawater (Carter, 1980). Profiles of potential temperature, salinity, and dissolved oxygen are based on the calibrated CTD data. The black dots on the SiO_2 , PO_4 and NO_3 profiles represent bottle positions. All isopleths are interpolated linearly between observations, and contoured by hand.

Acknowledgments

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Description of Tables

Table 1: RRS *Charles Darwin* Cruise #29 Shipboard Personnel.

Table 2: RRS *Charles Darwin* Cruise #29 CTD Station Summary Information.

Table 3: RRS *Charles Darwin* Cruise #29 XBT Station Summary Information.

Table 4: Parameters of the CTD Oxygen Algorithm Used to Calibrate RRS *Darwin* Cruise #29 CTD Oxygen Data.

$$O_{xm} = \left[\alpha \left(O_c + \beta \left(\frac{dO_c}{dt} \right) \right) + C \right] O_{xsat}(T, S) e^{D [T + E (T_o - T)] + F P}$$

where, O_c is the oxygen current measurement; P & T are CTD pressure (dbar) and temperature ($^{\circ}C$); T_o is the oxygen sensor temperature ($^{\circ}C$); S is salinity computed on the 1978 practical salinity scale; α is the oxygen current slope adjustment, β is the oxygen sensor lag in seconds; and C is the oxygen current bias adjustment.

Table 5: RRS *Charles Darwin* Cruise #29 Average Along- and Across-Track ADCP Velocity Estimates. [Velocities are between 96 and 208 db as computed between consecutive station positions. The last column shows the difference between the actual (ADCP) and computed (geostrophic) velocities between station pairs.]

Tables 1-5

Table 1: RRS *Charles Darwin* Cruise #29 Shipboard Personnel

Woods Hole Oceanographic Institution:

Dr. J. Toole	Co-Principal Investigator
Dr. B. Warren	Co-Principal Investigator
A. Morton	WHOI CTD Group - Manager
J. Kinder	WHOI CTD Group - Hardware Technician
M. Francis	Software Technician - Data Processor
R. Stanley	Rosette Oxygen Analyst
G. Knapp	Rosette Salt Analyst
J. Zemba	Watchstander

Oregon State University:

J. Jennings	Rosette Nutrient Analyst
J. Johnson	Rosette Nutrient Analyst

University of Miami:

Dr. R. Fine	Co-Principal Investigator
K. Sullivan	Rosette CFC Analyst
L. Pope	Rosette CFC Analyst

NERC/RVS:

G. Miller	Instrumentation Technician
G. Knight	Computer System Manager
R. Griffiths	Mechanical Technician
K. Smith	Mechanical Technician

Officers and Engineers:

S. Mayl (Master)
G. Harries
S. Sykes
G. Procter
J. Baker
D. Anderson
A. Greenhorn
W. Groody

Crew:

C. Woods
A. Olds
D. Buffery
M. Metcalfe
K. Peters
P. Bishop
J. McKeown
A. Philp
J. Coleman
I. Gibb
G. Pook
P. Hough

Table 2: RRS *Charles Darwin* Cruise #29 CTD Station Summary Information

Stn	Cast	Day/Mo/Yr	St GMT	End GMT	Latitude	Longitude	P Max	Depth	CTD #
1-test	0	13/11/87	0625	0746	-31°35.07'	31°10.56'	3127	3107	9
2-test	0	13/11/87	1000	1100	-31°34.86'	31°09.55'	889	3071	8
2-test	1	13/11/87	1350	1420	-31°34.86'	31°09.55'	911	3071	8
2-test	2	13/11/87	1652	1723	-31°35.13'	31°08.09'	1505	3071	9
3	0	13/11/87	2035	2140	-31°22.54'	30°50.10'	2951	2931	9
4	0	14/11/87	0125	0230	-31°15.59'	30°39.30'	2935	2926	9
5	0	14/11/87	0546	0658	-31°12.09'	30°35.84'	2655	2675	9
6	0	14/11/87	0929	1025	-31°09.14'	30°32.08'	2247	2306	9
7	0	14/11/87	1219	1300	-31°06.12'	30°27.82'	1783	1739	9
8	0	14/11/87	1440	1508	-31°02.91'	30°24.17'	893	905	9
9	0	14/11/87	1637	1649	-31°02.95'	30°22.07'	247	290	9
10	0	14/11/87	1720	1729	-31°02.31'	30°21.21'	65	90	9
11-test	0	15/11/87	0332	0415	-30°18.46'	31°19.84'	1175	1178	8
12	0	16/11/87	0148	0303	-31°34.73'	31°09.67'	3107	3091	8
13	0	16/11/87	1138	1249	-31°56.62'	31°36.31'	3567	3535	8
14	0	16/11/87	1947	2122	-32°11.67'	32°30.13'	3581	3551	8
15	0	17/11/87	0442	0610	-32°32.75'	33°24.74'	3501	3491	8
16	0	17/11/87	1214	1310	-32°41.54'	34°10.30'	2461	2481	9
17	0	17/11/87	1849	1930	-32°53.96'	35°00.12'	1615	1593	9
18	0	17/11/87	2330	0008	-33°00.14'	35°35.04'	1469	1474	9
19	0	18/11/87	0340	0421	-32°59.37'	36°04.75'	2011	2006	9
20	0	18/11/87	0656	0750	-33°00.87'	36°20.65'	2603	2591	9
21	0	18/11/87	1029	1130	-33°00.69'	36°30.87'	3315	3304	9
22	0	18/11/87	1416	1551	-33°00.32'	36°40.49'	4755	4744	9
23	0	18/11/87	2033	2213	-32°59.65'	37°04.82'	5165	5108	9
24	0	19/11/87	0608	0742	-33°00.39'	37°59.97'	5127	5062	9
25	0	19/11/87	1802	1935	-32°59.42'	39°29.43'	5145	5092	9
26	0	20/11/87	0540	0714	-33°00.32'	41°00.34'	5097	5010	9
27	0	20/11/87	1752	1915	-32°59.71'	42°44.81'	4417	4352	9
28	0	20/11/87	2304	2350	-32°59.87'	43°02.46'	2337	2331	9
29	C	21/11/87	0420	0443	-32°59.95'	43°40.13'	909	906	9
30	0	21/11/87	0911	0933	-32°59.64'	44°29.41'	959	964	9
31	0	21/11/87	1815	1853	-33°12.41'	46°04.79'	2201	2196	9
32	0	21/11/87	2227	2321	-33°18.70'	46°30.25'	2673	2660	9
33	0	22/11/87	0302	0401	-33°22.78'	46°54.98'	3187	3147	9
34	0	22/11/87	0832	0940	-33°29.94'	47°26.84'	3629	3591	9
35	0	22/11/87	1538	1653	-33°33.66'	48°14.68'	4033	3976	9
36	0	23/11/87	0123	0245	-33°45.01'	49°30.39'	4397	4323	9
37	0	23/11/87	1135	1257	-33°59.75'	50°55.55'	4393	4336	9
38	0	23/11/87	2039	2206	-33°59.54'	52°10.57'	4587	4484	9
39	0	24/11/87	0249	0415	-33°59.91'	52°44.66'	4555	4444	9
40	0	24/11/87	0904	1032	-34°00.42'	53°10.22'	4687	4607	9
41	0	24/11/87	1522	1649	-34°00.45'	53°36.86'	4613	4586	9
42	0	24/11/87	2148	2309	-34°00.73'	54°07.11'	4455	4393	9
43	0	25/11/87	0919	1052	-33°59.46'	55°46.98'	4387	4291	9

Table 2 (Continued)

Stn	Cast	Day/Mo/Yr	St GMT	End GMT	Latitude	Longitude	P Max	Depth	CTD #
44	0	25/11/87	1945	2117	-33°58.35'	57°02.08'	5207	5129	9
45	0	26/11/87	0221	0401	-33°59.68'	57°29.09'	5433	5299	9
46	0	26/11/87	0953	1124	-33°59.93'	58°10.05'	5201	5093	9
47	0	26/11/87	1725	1842	-33°59.73'	58°53.63'	4011	3905	9
48	0	27/11/87	0218	0357	-33°59.61'	59°56.99'	5207	5150	9
49	0	27/11/87	0940	1124	-33°59.67'	60°34.15'	5447	5346	9
50	0	27/11/87	2102	2248	-33°59.37'	61°59.67'	5195	5125	9
51	0	28/11/87	1024	1146	-33°59.53'	63°59.93'	4755	4649	9
52	0	28/11/87	2340	0100	-33°59.81'	66°00.21'	4587	4582	9
53	0	29/11/87	1200	1321	-34°00.14'	67°59.86'	4619	4547	9
54	0	30/11/87	0120	0242	-33°59.95'	70°00.33'	4397	4302	9
55	0	30/11/87	1435	1606	-34°00.10'	71°59.84'	5063	4987	9
56	0	01/12/87	0133	0250	-33°19.52'	73°20.15'	4133	4109	9
57	0	01/12/87	1224	1330	-32°40.09'	74°39.66'	3789	3678	9
58	0	01/12/87	2354	0055	-31°59.89'	76°00.09'	3419	3380	9
59	0	02/12/87	0826	0923	-31°30.03'	76°59.91'	3033	2962	9
60	0	02/12/87	1510	1609	-31°07.67'	77°44.36'	3073	3003	9
61	0	02/12/87	2212	2313	-30°45.01'	78°29.81'	3557	3471	9
62	0	03/12/87	0522	0631	-30°22.43'	79°15.32'	3795	3739	9
63	0	03/12/87	1241	1345	-30°00.44'	80°00.14'	3565	3476	9
64	0	03/12/87	2125	2242	-29°30.23'	80°59.51'	4219	4129	9
65	0	04/12/87	0633	0739	-29°00.23'	82°00.09'	4173	4124	9
66	0	04/12/87	1816	1932	-29°09.41'	83°29.55'	4447	4368	9
67	0	05/12/87	0500	0613	-29°19.23'	84°59.44'	3993	3885	9
68	0	05/12/87	1315	1437	-29°27.94'	85°58.69'	4527	4470	9
69	0	05/12/87	2205	2311	-29°32.16'	86°55.20'	3587	3562	9
70	0	06/12/87	0540	0609	-29°39.75'	87°50.08'	1355	1228	9
71	0	06/12/87	1030	1107	-29°49.81'	88°34.84'	1843	1844	9
72	0	06/12/87	1649	1731	-30°04.66'	89°29.86'	2283	2282	9
73	0	07/12/87	0011	0046	-30°20.00'	90°30.30'	1663	1670	9
74	0	07/12/87	0825	0902	-30°40.05'	91°49.63'	1935	1928	9
75	0	07/12/87	1720	1746	-30°50.29'	93°24.64'	1237	1248	9
76	0	08/12/87	0101	0131	-31°10.82'	94°26.11'	1559	1571	9
77	0	08/12/87	0731	0755	-31°33.96'	95°27.31'	1213	1223	9
78	0	08/12/87	1401	1429	-31°59.70'	96°29.67'	1293	1305	9
79	0	08/12/87	2136	2210	-32°00.06'	97°44.79'	1619	1617	9
80	0	09/12/87	0451	0535	-31°59.88'	99°00.12'	2105	2089	9
81	0	09/12/87	1102	1147	-31°59.61'	99°58.56'	2423	2407	9
82	0	09/12/87	1822	1906	-31°59.94'	100°59.48'	2235	2228	9
83	0	10/12/87	0036	0128	-32°14.54'	101°49.73'	2873	2842	9
84	0	10/12/87	0429	0538	-32°20.11'	102°00.03'	3785	3740	9
85	0	10/12/87	0953	1105	-32°24.90'	102°29.69'	4069	4014	9
86	0	10/12/87	1356	1520	-32°29.73'	102°39.41'	4633	4544	9
87	0	10/12/87	1917	2045	-32°35.90'	102°59.45'	4855	4779	9
88	0	11/12/87	0109	0248	-32°44.88'	103°24.00'	5341	5261	9
89	0	11/12/87	0824	1003	-32°54.91'	103°59.00'	5559	5467	9

Table 2 (Continued)

Stn	Cast	Day/Mo/Yr	St GMT	End GMT	Latitude	Longitude	P Max	Depth	CTD #
90	0	11/12/87	1519	1658	-33°05.54'	104°30.27'	5535	5508	9
91	0	11/12/87	2207	2353	-33°14.90'	105°00.14'	6053	5927	9
92	0	12/12/87	0646	0826	-33°26.35'	105°44.89'	5417	5415	9
93	0	12/12/87	1524	1717	-33°39.61'	106°29.47'	5607	5514	9
94	0	13/12/87	0013	0204	-33°53.66'	107°13.45'	5385	5302	9
95	0	13/12/87	0846	0958	-34°09.78'	107°59.77'	5065	4984	8
96	0	13/12/87	1514	1701	-34°09.85'	108°34.38'	5545	5452	9
97	0	13/12/87	2226	0014	-34°10.00'	109°09.05'	5145	5014	9
98	0	14/12/87	0514	0620	-34°09.89'	109°42.30'	3303	3260	9
99	0	14/12/87	0920	1018	-34°09.92'	110°00.08'	2589	2572	9
100	0	14/12/87	1647	1736	-34°09.80'	110°59.81'	2123	2123	9
101	0	15/12/87	0012	0109	-34°09.66'	112°09.72'	2635	2627	9
102	0	15/12/87	1201	1259	-34°09.26'	113°29.39'	3041	3023	9
103	0	15/12/87	1613	1709	-34°10.10'	113°43.81'	2223	2208	9
104	0	15/12/87	1945	2023	-34°10.06'	113°59.84'	1503	1508	9
105	0	15/12/87	2240	2307	-34°10.93'	114°14.53'	1069	1078	9
106	0	16/12/87	0049	0111	-34°10.22'	114°24.64'	685	700	9
107	0	16/12/87	0220	0226	-34°09.71'	114°30.26'	141	160	9
108	0	16/12/87	0353	0358	-34°10.27'	114°44.85'	111	130	9
109	0	16/12/87	0438	0440	-34°09.52'	114°49.64'	41	55	9

Table 3: RRS *Charles Darwin* Cruise #29 XBT Station Summary Information

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surf salt (psu)	Comment
7-2A	320	0753	31°46.89'	31°07.69'	20.9	---	
7-3A	320	0855	31°48.76'	31°11.58'	21.0	---	
7-4A	320	0953	31°51.14'	31°20.71'	21.0	---	
7-5A	320	1052	31°53.46'	31°29.22'	20.9	---	
7-6A	320	1546	32°59.00'	31°41.80'	20.8	---	
7-7A	320	1655	32°03.98'	31°53.61'	20.7	---	
7-8A	320	1749	32°07.13'	32°05.98'	20.7	---	
7-9A	320	1846	32°09.50'	32°17.70'	20.7	---	
7-10A	320	2351	32°13.71'	32°36.47'	20.5	---	
7-11A	321	0045	32°17.81'	32°46.22'	20.3	---	
7-12A	321	0146	32°23.32'	32°55.55'	20.1	---	no good
7-13A	321	0215	32°24.45'	33°00.00'	20.0	---	redo
7-14A	321	0316	32°28.42'	33°10.30'	20.0	---	no good
7-15A	321	0336	32°30.18'	33°13.54'	20.1	---	redo
7-16A	321	0909	32°36.43'	33°36.19'	19.9	---	
7-17A	321	1004	32°39.01'	33°45.57'	19.9	---	no good
7-18A	321	1005	32°39.01'	33°45.57'	19.9	---	redo
7-19A	321	1108	32°40.96'	33°57.75'	20.1	---	
7-20A	321	1510	32°43.61'	34°17.76'	20.2	---	
7-21A	321	1530	32°45.18'	34°21.30'	20.3	---	
7-22A	321	1629	32°49.36'	34°32.30'	20.2	---	
7-23A	321	1727	32°52.30'	34°43.24'	20.1	---	
7-24A	321	1815	32°54.57'	34°54.04'	20.1	---	
7-25A	321	2133	32°56.37'	35°14.16'	20.1	---	
7-26A	321	2230	32°58.48'	35°25.60'	19.3	---	
7-27A	322	0204	33°00.00'	35°48.48'	19.7	---	no good
7-28A	322	0216	33°00.00'	35°51.00'	19.7	---	redo
7-29A	322	1132	33°00.87'	36°32.91'	19.9	---	
7-30A	322	1930	32°59.42'	36°52.96'	19.2	---	
7-31A	323	0138	33°00.06'	37°12.24'	19.0	---	
7-32A	323	0244	33°01.18'	37°24.12'	18.9	---	
7-33A	323	0343	33°00.48'	37°34.18'	19.0	---	
7-34A	323	0442	33°00.42'	37°45.36'	19.0	---	
7-35A	323	1122	32°59.83'	38°07.79'	19.1	35.76	
7-36A	323	1227	33°02.98'	38°20.91'	19.8	35.62	
7-37A	323	1330	33°02.42'	38°33.48'	19.3	35.72	
7-38A	323	1429	33°03.00'	38°47.48'	18.9	35.74	
7-39A	323	1529	33°02.54'	39°00.48'	18.9	35.62	
7-39B	323	1630	33°01.60'	39°12.90'	19.1	---	
7-40A	323	2330	32°59.56'	39°45.02'	19.1	35.71	
7-41A	324	0024	33°00.89'	39°56.27'	19.0	35.71	
7-42A	324	0129	33°00.54'	40°10.30'	18.8	35.74	no good
7-43A	324	0140	33°00.48'	40°12.54'	18.7	35.74	redo
7-44A	324	0244	33°00.24'	40°27.12'	18.8	35.74	
7-45A	324	0344	32°59.54'	40°40.12'	18.8	35.74	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surfsalt (psu)	Comment
7-46A	324	0445	33°00.06'	40°53.12'	18.7	35.74	
7-47A	324	1026	33°00.11'	41°10.10'	19.3	35.70	
7-48A	324	1128	33°00.08'	41°22.70'	18.9	35.70	
7-48B	324	1128	33°00.08'	41°22.70'	18.9	35.70	
7-49A	324	1337	33°02.40'	41°52.30'	20.7	---	
7-50A	324	1429	33°02.70'	42°03.20'	19.6	---	
7-51A	324	1606	33°01.54'	42°24.06'	20.7	---	
7-52A	324	1619	33°01.48'	42°27.06'	20.9	---	
7-53A	324	1720	33°00.28'	42°39.49'	19.9	---	
7-54A	324	2200	33°00.16'	42°51.67'	20.7	35.59	
7-55A	325	0214	32°59.85'	43°17.27'	19.2	35.65	
7-56A	325	0319	32°59.48'	43°30.36'	19.2	35.62	
7-57A	325	0614	33°00.38'	43°50.29'	19.1	35.62	
7-58A	325	0715	32°59.04'	44°06.50'	19.9	---	
7-59A	325	0815	32°59.30'	44°20.39'	19.7	---	
7-60A	325	1131	33°00.73'	44°45.69'	19.7	35.66	
7-60B	325	On data tape, but not listed in station log with all information					
7-61A	325	1306	33°04.73'	45°04.00'	18.9	35.63	
7-62A	325	1410	33°08.37'	45°16.34'	18.8	35.62	
7-63A	325	1526	33°11.00'	45°30.54'	18.7	35.64	
7-64A	325	1546	33°11.28'	45°34.48'	19.2	35.63	
7-65A	325	1648	33°12.70'	45°48.50'	18.8	---	
7-66A	325	2100	33°14.88'	46°14.98'	19.3	35.57	
7-66B	325	2100	33°14.88'	46°14.98'	19.3	35.57	
7-67B	326	0721	33°25.36'	47°13.12'	19.4	---	no good
7-68A	326	0751	33°26.36'	47°18.36'	19.3	---	
7-69A	326	1220	33°30.30'	47°36.70'	19.2	---	
7-70A	326	1258	33°30.54'	47°44.18'	20.0	---	
7-71A	326	1328	33°33.55'	47°51.15'	20.0	---	
7-72A	326	1349	33°33.54'	47°54.30'	---	---	
7-73A	326	1448	33°33.60'	47°06.20'	---	---	
7-74A	326	1952	33°37.66'	48°26.11'	---	---	
7-75A	326	2056	33°38.67'	48°37.86'	19.3	35.55	
7-76A	326	2202	33°40.33'	48°51.08'	19.3	35.56	
7-77A	326	2303	33°41.58'	49°04.10'	19.3	35.57	
7-78A	327	0003	33°43.00'	49°16.06'	19.6	35.62	
7-79A	327	0558	33°47.50'	49°43.16'	20.3	---	
7-80A	327	0700	33°49.64'	50°56.18'	20.2	---	
7-81A	327	0857	33°56.62'	50°22.41'	20.6	35.75	
7-82A	327	1002	33°57.04'	50°37.36'	20.1	35.76	
7-83A	327	1055	33°58.18'	50°48.64'	20.7	35.77	
7-84A	327	1600	33°59.19'	51°09.09'	21.5	---	
7-85A	327	1700	34°00.48'	51°29.91'	21.1	---	
7-86A	327	1800	34°01.30'	51°37.19'	20.8	---	
7-87A	327	1900	34°01.01'	51°50.85'	20.0	---	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surftemp (°C)	Surfsalt (psu)	Comment
7-88A	328	0058	33°59.12'	52°21.54'	20.1	35.78	
7-89A	328	0204	34°00.06'	52°35.54'	20.0	35.76	
7-90A	328	0701	33°59.32'	52°51.57'	20.2	- - -	
7-91A	328	1340	33°59.44'	53°21.54'	20.1	35.75	
7-92A	328	2003	34°00.69'	53°52.09'	19.5	35.74	
7-93A	328	2100	34°01.27'	54°03.69'	20.0	35.74	
7-94A	329	0223	34°01.30'	54°18.54'	20.2	35.75	
7-95A	329	0322	34°00.54'	54°29.24'	19.7	35.74	
7-96A	329	0430	34°00.95'	54°46.50'	19.5	35.77	
7-97A	329	0530	34°01.00'	54°59.00'	19.1	35.72	
7-80B	329	0631	34°01.35'	55°11.58'	18.9	35.73	
7-81B	329	0802	34°01.32'	55°31.76'	20.0	35.77	
7-98A	329	1517	33°59.59'	55°59.77'	- - -	- - -	
7-99A	329	1615	33°59.95'	56°11.91'	19.2	35.73	
7-100A	329	1715	33°59.65'	56°26.34'	19.1	35.77	
7-101A	329	1815	34°00.62'	56°35.49'	19.5	35.71	
7-102A	329	1915	34°01.02'	56°52.50'	18.7	35.70	
7-103A	330	0029	34°00.24'	57°07.12'	18.7	35.69	
7-104A	330	0128	34°00.24'	57°19.18'	18.3	35.69	
7-105A	330	0730	34°00.68'	57°40.17'	19.0	35.72	
7-106A	330	0830	34°00.07'	57°53.21'	19.0	35.72	
7-107A	330	1439	33°59.42'	58°19.54'	18.8	35.65	no good
7-109A	330	1506	33°59.10'	58°25.20'	18.7	- - -	redo
7-115A	331	1015	34°00.00'	60°34.00'	- - -	- - -	no good
7-118A	331	1653	33°59.60'	61°11.00'	18.9	35.64	
7-120A	331	1943	34°00.83'	61°45.37'	19.1	35.62	
7-121A	331	2000	34°00.87'	61°48.50'	19.2	35.64	
7-122A	332	0158	33°59.54'	62°11.00'	18.9	35.60	
7-124A	332	0428	34°00.12'	62°40.42'	19.1	35.65	
7-127A	332	0656	34°01.06'	63°14.34'	19.3	35.67	
7-128A	332	0754	34°01.09'	63°28.02'	19.3	35.68	
7-129A	332	0856	34°00.36'	63°41.97'	19.4	35.65	
7-130A	332	1500	33°58.72'	64°13.82'	19.5	35.77	
7-131A	332	1600	34°00.29'	64°27.39'	19.2	35.66	
7-132A	332	1700	34°00.74'	64°39.37'	19.1	35.68	
7-133A	332	1800	34°02.09'	64°52.44'	19.2	35.67	
7-134A	332	1922	34°02.39'	65°08.87'	18.8	35.64	
7-135A	332	2013	34°01.18'	65°19.55'	18.9	35.62	
7-136A	332	2111	34°00.07'	65°30.89'	19.3	35.72	
7-137A	332	2200	33°59.96'	65°41.03'	19.6	35.83	
7-138A	333	0358	34°00.90'	66°10.33'	19.0	35.75	
7-139A	333	0500	34°00.75'	66°22.29'	18.9	35.75	
7-140A	333	0600	34°01.01'	66°36.47'	18.9	35.75	
7-141A	333	0704	34°00.64'	66°51.21'	19.1	35.75	
7-142A	333	0800	34°00.96'	67°05.38'	19.3	35.78	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surftemp (°C)	Surfsalt (psu)	Comment
7-143A	333	0858	34°00.61'	67°18.82'	19.4	35.80	
7-144A	333	0959	34°00.24'	67°32.82'	19.8	35.84	
7-145A	333	1101	33°59.36'	67°47.18'	19.8	35.84	
7-146A	333	1631	33°58.64'	68°11.92'	19.1	35.73	
7-147A	333	1730	33°59.94'	68°24.50'	19.1	35.73	
7-148A	333	1828	34°00.23'	68°36.71'	18.3	35.66	
7-149B	333	1925	34°00.27'	68°48.91'	18.3	35.65	redo
7-150A	333	2028	34°00.00'	69°02.41'	18.2	35.61	
7-151A	333	2126	33°59.99'	69°14.48'	18.1	35.59	
7-152A	333	2226	33°59.77'	69°25.87'	18.1	35.60	
7-153A	333	2322	33°59.24'	69°37.42'	18.6	35.68	
7-154A	334	0027	34°00.06'	69°51.00'	19.0	35.78	
7-155A	334	0529	34°00.65'	70°11.15'	18.9	35.78	
7-156A	334	0630	34°00.06'	70°22.55'	18.8	35.78	
7-157A	334	0727	34°00.42'	70°34.67'	18.4	35.73	
7-158A	334	0828	34°00.43'	70°46.91'	17.9	35.54	
7-159A	334	0923	34°00.42'	70°58.29'	17.7	35.55	
7-160A	334	1021	34°00.07'	71°08.94'	17.9	35.58	
7-161A	334	1130	34°00.06'	71°22.42'	17.7	35.54	
7-163A	334	1243	34°00.50'	71°37.20'	17.9	34.44	
7-164A	334	1331	34°00.18'	71°47.24'	17.8	35.48	
7-165A	334	1923	33°55.03'	72°11.04'	17.9	35.51	
7-166A	334	2022	33°49.53'	72°21.30'	18.0	35.55	
7-167A	334	2121	33°46.80'	72°36.55'	18.5	35.85	
7-168A	334	2222	33°40.65'	72°47.42'	18.5	35.89	
7-169A	334	2330	33°33.20'	72°58.10'	18.3	35.88	
7-170A	335	0031	33°25.48'	73°09.18'	18.4	35.86	
7-171A	335	0530	33°15.71'	73°28.18'	18.6	35.92	
7-172A	335	0630	33°10.29'	73°38.14'	18.6	35.92	
7-173A	335	0721	33°05.50'	73°50.79'	18.4	35.70	
7-174A	335	0823	32°59.38'	74°02.73'	18.8	35.74	
7-175A	335	0921	32°54.10'	74°12.72'	19.1	35.83	
7-176A	335	1022	32°48.21'	74°23.69'	19.3	35.96	
7-177A	335	1121	32°45.24'	74°31.30'	19.2	35.97	
7-178A	335	1630	32°36.08'	74°51.11'	19.1	35.99	
7-179A	335	1730	32°31.21'	75°00.12'	19.3	35.98	
7-180A	335	1831	32°26.07'	75°09.35'	19.3	35.98	
7-181A	335	1922	32°22.03'	75°16.53'	19.3	35.97	
7-182A	335	2021	32°16.93'	75°24.87'	19.2	35.95	
7-183A	335	2123	32°11.89'	75°37.87'	18.9	35.94	
7-184A	335	2223	32°06.92'	75°47.38'	19.3	35.98	
7-185A	336	0330	31°55.73'	76°07.76'	18.8	35.95	
7-186A	336	0430	31°51.78'	76°20.56'	18.9	35.97	
7-187A	336	0530	31°46.43'	76°31.79'	19.0	35.97	
7-188A	336	0630	31°40.80'	76°41.72'	19.8	35.96	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surfsalt (psu)	Comment
7-189A	336	0722	31°35.80'	76°51.29'	18.7	35.82	
7-190A	336	1147	31°25.48'	77°07.18'	19.3	35.99	
7-191A	336	1243	31°21.42'	77°19.48'	19.6	36.04	
7-192A	336	1358	31°14.54'	77°31.18'	19.0	36.03	
7-193A	336	1455	31°08.29'	77°42.30'	19.7	35.99	
7-194A	336	1825	31°03.82'	77°53.01'	20.1	36.00	no record
7-194B	336	1922	30°59.36'	78°03.71'	20.0	36.00	
7-195A	336	2028	30°53.63'	78°14.04'	19.4	36.02	
7-196A	336	2122	30°48.36'	78°23.27'	19.3	36.03	
7-197A	337	0144	30°40.42'	78°37.06'	19.4	36.01	
7-198A	337	0245	30°35.83'	78°48.51'	19.1	36.01	
7-199A	337	0345	30°30.41'	78°58.89'	19.2	36.01	
7-200A	337	0446	30°24.89'	79°10.84'	18.9	35.82	
7-201A	337	0825	30°21.59'	79°16.78'	19.7	35.93	
7-202A	337	0926	30°17.15'	79°27.45'	20.3	35.99	
7-203A	337	1030	30°11.06'	79°37.24'	20.2	35.99	
7-207A	337	1130	30°06.50'	79°49.20'	20.1	35.72	
7-208A	337	1231	30°00.24'	79°59.18'	20.1	35.99	
7-209A	337	1600	29°57.78'	80°04.74'	20.0	36.00	
7-210A	337	1700	29°52.86'	80°16.06'	19.9	36.00	
7-211A	337	1759	29°48.38'	80°25.06'	19.8	36.02	
7-212A	337	1856	29°43.67'	80°36.08'	19.7	36.02	
7-213A	337	1958	29°38.42'	80°45.89'	19.6	36.07	
7-214A	337	2059	29°30.84'	80°56.30'	19.8	36.01	
7-215A	338	0144	29°25.06'	81°07.30'	19.0	35.94	
7-216A	338	0245	29°20.39'	81°19.49'	18.9	35.84	
7-217A	338	0347	29°15.34'	81°29.71'	19.5	35.93	
7-218A	338	0445	29°09.12'	81°42.93'	19.6	35.97	
7-219A	338	0545	29°03.74'	81°54.20'	19.8	35.89	
7-220A	338	0930	28°59.10'	82°02.13'	21.0	35.97	
7-221A	338	1049	29°01.48'	82°18.48'	21.2	35.89	
7-222A	338	1147	29°05.00'	82°29.36'	21.0	35.92	
7-223A	338	1245	29°07.00'	82°40.42'	21.2	35.89	
7-224A	338	1349	29°08.56'	82°53.77'	21.6	35.81	
7-225A	338	1445	29°09.32'	83°05.14'	21.8	35.83	
7-226A	338	1545	29°10.25'	83°18.76'	22.0	35.78	
7-227A	338	2220	29°10.94'	83°38.46'	21.2	35.85	
7-228A	338	2322	29°13.06'	83°51.06'	21.2	35.82	
7-229A	339	0022	29°14.42'	84°03.30'	21.6	35.82	
7-230A	339	0122	29°16.00'	84°15.00'	21.6	35.79	
7-231A	339	0230	29°17.62'	84°30.41'	21.4	35.81	
7-232A	339	0330	29°19.18'	84°42.66'	21.4	35.95	
7-233A	339	0900	29°20.95'	85°08.73'	22.0	36.01	
7-234A	339	1101	29°26.24'	85°33.42'	22.4	36.07	
7-235A	339	1217	29°27.48'	85°49.12'	22.5	35.97	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surfsalt (psu)	Comment
7-236A	339	1731	29°27.94'	86°07.15'	21.5	36.03	
7-237A	339	1827	29°28.70'	86°17.57'	21.4	36.03	
7-238A	339	1928	29°29.60'	86°28.83'	21.5	36.04	
7-239A	339	2022	29°33.29'	86°39.60'	21.7	36.03	
7-240A	339	2128	29°33.57'	86°50.11'	21.5	36.01	
7-241A	340	0205	29°35.34'	87°07.03'	21.3	36.00	
7-242A	340	0300	29°36.79'	87°17.98'	21.3	35.94	
7-243A	340	0400	29°38.99'	87°31.13'	21.6	35.95	
7-244A	340	0500	29°39.87'	87°43.53'	21.6	36.00	
7-245A	340	0721	29°42.75'	87°55.26'	21.7	36.99	
7-246A	340	0825	29°45.45'	88°10.15'	21.5	36.00	
7-247A	340	0926	29°47.96'	88°22.93'	22.0	36.00	
7-248A	340	1316	29°52.90'	88°50.60'	21.3	36.00	
7-249A	340	1415	29°56.30'	89°01.80'	21.3	37.02	
7-250A	340	1515	29°59.63'	89°12.80'	21.1	36.02	
7-251A	340	1615	30°03.44'	89°24.32'	21.1	36.01	
7-252A	340	1922	30°07.13'	89°38.07'	21.0	35.99	
7-253A	340	2030	30°10.98'	89°50.92'	20.5	35.96	
7-254A	340	2130	30°14.00'	90°00.68'	20.8	35.94	
7-255A	340	2231	30°16.12'	90°12.24'	20.6	36.01	
7-256A	340	2330	30°18.00'	90°23.18'	21.3	36.01	
7-257A	341	0230	30°22.16'	90°40.81'	21.1	36.04	
7-258A	341	0330	30°25.00'	90°53.39'	21.2	36.05	
7-259A	341	0430	30°28.81'	91°04.98'	21.4	36.03	
7-260A	341	0530	30°31.66'	91°16.84'	21.0	36.05	
7-261A	341	0622	30°34.55'	91°27.08'	20.5	35.94	
7-262A	341	0724	30°36.73'	91°40.28'	20.8	35.93	
7-263A	341	1110	30°42.30'	92°02.20'	20.8	---	
7-264A	341	1230	30°45.20'	92°19.10'	20.4	35.95	
7-265A	341	1332	30°46.12'	92°30.48'	20.3	35.98	
7-267A	341	1432	30°46.92'	92°41.91'	19.5	35.85	
7-268A	341	1530	30°48.21'	92°53.40'	19.5	35.85	
7-269A	341	1630	30°49.12'	92°05.56'	19.5	35.85	
7-270A	341	1930	30°54.09'	93°26.84'	19.6	35.95	
7-271A	341	2024	30°56.73'	93°37.21'	19.6	35.91	
7-272A	341	2126	30°59.51'	93°48.22'	19.3	35.92	
7-273A	341	2231	31°03.00'	93°59.12'	20.0	36.02	
7-274A	341	2331	31°06.10'	94°10.60'	20.0	36.03	
7-275A	342	0030	31°08.70'	94°21.10'	20.0	36.05	
7-276A	342	0330	31°18.48'	94°41.29'	19.4	35.89	
7-277A	342	0430	31°21.28'	94°51.93'	19.7	35.95	
7-278A	342	0523	31°25.53'	95°02.59'	19.7	35.95	
7-279A	342	0627	31°31.54'	95°15.51'	19.7	35.95	
7-280A	342	0930	31°38.48'	95°39.48'	19.5	35.99	
7-281A	342	1030	31°43.30'	95°52.20'	19.5	35.99	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surf salt (psu)	Comment
7-282A	342	1129	31°47.36'	96°02.54'	18.9	35.66	
7-283A	342	1226	31°52.24'	96°12.30'	19.2	35.81	
7-284A	342	1330	31°58.11'	96°24.68'	19.1	35.82	
7-285A	342	1527	32°00.52'	96°33.29'	18.7	35.89	
7-286A	342	1629	32°00.27'	96°45.81'	19.1	35.65	
7-287A	342	1732	32°00.46'	96°57.93'	18.2	35.59	
7-288A	342	1824	32°00.19'	97°08.04'	18.3	35.61	
7-289A	342	1925	31°59.98'	97°19.80'	18.7	35.58	
7-290A	342	2025	32°01.03'	97°32.11'	19.3	35.82	
7-291A	343	0002	32°00.60'	97°55.80'	19.0	36.02	
7-292A	343	0115	32°00.45'	98°10.61'	19.2	36.05	
7-293A	343	0212	32°00.79'	98°24.35'	18.8	36.04	
7-294A	343	0330	32°00.51'	98°42.29'	19.2	36.05	
7-295A	343	0430	31°59.90'	98°56.01'	19.3	36.05	
7-296A	343	0730	32°00.10'	99°12.96'	19.1	36.07	
7-297A	343	0826	32°59.72'	99°25.55'	19.2	36.02	
7-298A	343	0929	32°00.00'	99°40.06'	19.4	36.02	
7-299A	343	1031	31°59.30'	99°53.60'	18.3	35.68	
7-300A	343	1330	31°59.77'	100°06.34'	17.9	35.65	
7-301A	343	1430	32°00.00'	100°18.21'	18.1	35.63	
7-302A	343	1530	32°01.19'	100°28.54'	18.5	35.84	
7-303A	343	1630	32°00.71'	100°40.19'	17.5	35.64	
7-304A	343	1726	32°00.89'	100°50.66'	17.8	35.50	
7-305A	343	2027	32°01.65'	101°02.73'	18.3	35.84	
7-306A	343	2132	32°05.00'	101°16.12'	18.2	35.90	
7-307A	343	2229	32°09.06'	101°25.48'	18.4	35.88	
7-308A	343	2330	32°12.30'	101°37.60'	18.0	35.74	no good
7-309A	344	0828	32°22.34'	102°14.04'	18.0	35.74	
7-310A	344	2400	32°39.66'	103°12.05'	17.6	35.75	
7-311A	345	0601	32°47.66'	103°34.13'	18.1	35.92	
7-312A	345	0655	32°50.67'	103°43.92'	17.9	35.91	
7-313A	345	1344	32°59.95'	104°13.47'	17.9	35.98	
7-314A	345	2013	33°09.12'	104°41.65'	18.3	35.93	
7-315A	345	2115	33°16.50'	104°52.00'	17.9	35.94	
7-316A	346	0330	33°18.00'	105°10.70'	18.0	35.91	
7-317A	346	0430	33°21.94'	105°22.08'	18.1	35.93	
7-318A	346	1210	33°28.84'	105°57.11'	19.3	36.01	
7-319A	346	1310	33°32.52'	106°07.10'	19.3	36.02	
7-320A	346	1410	33°36.49'	106°16.45'	19.1	36.01	
7-321B	346	2057	33°44.24'	106°40.18'	18.7	36.00	no good due to bad launcher test/cal stn 94
7-322A	346	2129	33°46.30'	106°45.30'	18.7	36.00	
7-322B	346	2144	33°47.18'	106°47.54'	18.6	36.00	
7-777A	346	---	---	---	---	---	
7-323A	347	0530	33°58.42'	107°26.95'	17.4	35.84	
7-324A	347	0628	34°02.38'	107°36.86'	17.4	35.84	

Table 3 (Continued)

XBT #	JDAY (1987)	Time (GMT)	Latitude (°S)	Longitude (°E)	Surf temp (°C)	Surf salt (psu)	Comment
7-325A	347	0724	34°05.87'	107°47.10'	17.3	35.85	
7-326A	347	1310	34°10.00'	108°11.26'	17.1	35.83	
7-327A	347	1413	34°10.15'	108°23.05'	17.1	35.83	
7-328A	347	2023	34°10.18'	108°47.06'	17.2	35.79	
7-329A	347	2120	34°10.42'	108°58.06'	17.3	35.79	
7-330A	348	0340	34°10.50'	109°24.07'	17.3	35.80	
7-331A	348	0430	34°10.82'	109°35.23'	17.3	35.80	
7-332A	348	0845	34°09.48'	109°54.36'	17.4	35.79	
7-332B	348	1159	34°09.92'	110°05.43'	17.3	35.77	
7-333A	348	1258	34°10.58'	110°17.81'	17.2	35.77	
7-334A	348	1400	34°19.93'	110°27.84'	16.9	35.67	
7-335A	348	1500	34°11.00'	110°40.88'	16.8	35.70	
7-336A	348	1600	34°10.69'	110°51.98'	17.2	35.72	
7-337A	348	1923	34°09.80'	111°09.00'	18.0	35.89	
7-338A	348	2029	34°10.30'	111°23.42'	18.0	35.89	
7-339A	348	2129	34°10.30'	111°36.06'	18.0	35.89	
7-340A	348	2229	34°10.18'	111°48.42'	18.0	35.90	
7-341A	348	2330	34°10.00'	111°58.60'	18.0	35.89	
7-342A	349	0300	34°10.32'	112°19.33'	17.9	35.77	
7-343A	349	0405	34°10.79'	112°33.99'	17.9	35.85	
7-344A	349	0828	34°09.54'	112°47.48'	17.8	36.65	
7-345A	349	0930	34°09.80'	113°00.70'	---	---	
7-346A	349	1027	34°10.24'	113°12.54'	18.9	35.93	
7-347A	349	1129	34°10.10'	113°24.30'	18.9	35.93	

Table 4: Parameters of the CTD Oxygen Algorithm Used to Calibrate
RRS *Charles Darwin* Cruise #29 CTD Oxygen Data

Stations	C	α	D	E	F	β
1	0.163	0.532	0.1456E-03	-0.1107E-01	0.3594E+00	0.8115E+01
3-5	0.061	0.666	0.1581E-03	-0.2037E-01	0.1019E+01	0.8000E+01
6-7	0.007	0.767	0.1557E-03	-0.2738E-01	0.9145E+00	0.6274E+01
11-12	-0.020	0.798	0.1954E-03	-0.2367E-01	0.1943E+00	0.1780E+02
13-15	-0.003	0.795	0.1701E-03	-0.2317E-01	0.8059E+00	0.8016E+01
16-19	0.040	0.660	0.1887E-03	-0.2089E-01	0.5664E+00	0.3696E+01
20-22	0.024	0.744	0.1509E-03	-0.2653E-01	0.8161E+00	0.4182E+01
23-24	0.026	0.748	0.1455E-03	-0.2537E-01	0.1252E+01	0.8000E+01
25	0.009	0.801	0.1478E-03	-0.3024E-01	0.7307E+00	0.8000E+01
26	0.023	0.794	0.1390E-03	-0.2896E-01	0.8505E+00	0.7994E+01
27	0.049	0.725	0.1434E-03	-0.2417E-01	0.8776E+00	0.8000E+01
28-36	0.028	0.755	0.1462E-03	-0.2562E-01	0.9920E+00	0.4370E+01
37	0.108	0.648	0.1215E-03	-0.2436E-01	0.4646E+00	0.7990E+01
38	0.113	0.651	0.1227E-03	-0.2101E-01	0.5163E+00	0.7973E+01
39-42	0.038	0.747	0.1413E-03	-0.2674E-01	0.8302E+00	0.2819E+01
43-47	0.050	0.720	0.1400E-03	-0.2352E-01	0.1068E+01	0.4720E+00
48-55	0.036	0.748	0.1428E-03	-0.2513E-01	0.8710E+00	0.7999E+01
56	0.038	0.746	0.1427E-03	-0.2753E-01	0.7105E+00	0.7994E+01
57-58	0.053	0.719	0.1402E-03	-0.2225E-01	0.8985E+00	0.6000E+01
59-60	0.026	0.758	0.1525E-03	-0.2478E-01	0.9031E+00	0.8000E+01
61-64	0.037	0.739	0.1472E-03	-0.2357E-01	0.9310E+00	0.8005E+01
65-67	0.043	0.729	0.1457E-03	-0.2326E-01	0.7681E+00	0.8000E+01
68-69	0.046	0.725	0.1421E-03	-0.2223E-01	0.8972E+00	0.8000E+01
70-81	0.028	0.706	0.1784E-03	-0.2004E-01	0.7328E+00	0.8000E+01
82-83	0.036	0.711	0.1665E-03	-0.2107E-01	0.5484E+00	0.8000E+01
84-88	0.009	0.807	0.1471E-03	-0.2730E-01	0.8875E+00	0.8000E+01
89-91	0.029	0.777	0.1409E-03	-0.2612E-01	0.7450E+00	0.8001E+01
92-93	0.037	0.763	0.1394E-03	-0.2631E-01	0.7288E+00	0.7996E+01
95	-0.017	1.445	0.1000E-03	-0.2231E-01	0.7375E+00	0.8000E+01
96	0.049	0.757	0.1348E-03	-0.2692E-01	0.5672E+00	0.8000E+01
97-102	0.037	0.763	0.1394E-03	-0.2631E-01	0.7288E+00	0.7996E+01

Table 5: RRS *Charles Darwin* Cruise #29 Average Along- and Across-Track ADCP Velocity Estimates

Station Number		Along-Track Average ADCP Velocity m/s	Across-Track Average ADCP Velocity m/s	Across-Track ADCP-GEOST Velocity m/s
3	12	-0.220	-0.390	-0.096
4	3	-0.223	-0.649	0.031
5	4	-0.153	-0.731	-0.117
6	5	0.048	-0.890	0.327
7	6	-0.203	-1.040	0.315
8	7	-0.027	-0.917	0.398
9	8	-0.359	-0.289	0.086
12	13	0.031	-0.353	-0.087
13	14	0.067	-0.026	0.026
14	15	0.040	-0.072	-0.060
15	16	-0.112	-0.050	0.013
16	17	-0.030	0.092	0.048
17	18	0.054	0.128	0.046
18	19	0.111	0.026	-0.026
19	20	0.013	-0.035	0.001
20	21	-0.035	-0.032	0.083
21	22	-0.143	-0.088	0.124
22	23	-0.086	-0.040	0.136
23	24	-0.271	0.048	0.003
24	25	-0.167	-0.025	-0.046
25	26	-0.007	0.086	-0.039
26	27	0.106	-0.023	0.032
27	28	0.000	-0.058	0.262
28	29	0.039	-0.045	-0.096
29	30	0.112	0.112	0.063
30	31	-0.186	0.171	0.132
31	32	-0.089	0.040	0.006
32	33	-0.033	-0.030	-0.081
33	34	-0.062	0.074	0.051
34	35	-0.093	-0.023	-0.022
35	36	-0.065	-0.070	-0.008
36	37	0.067	-0.032	0.023
37	38	0.237	-0.008	0.010
38	39	0.204	-0.027	-0.074
39	40	0.345	0.047	0.036
40	41	0.181	-0.012	-0.057
41	42	0.224	0.015	0.031
42	43	0.055	0.023	0.016
43	44	-0.313	0.094	0.083
44	45	-0.059	-0.021	0.017
45	46	-0.003	-0.126	-0.033
46	47	-0.236	-0.114	-0.101
47	48	-0.342	0.003	-0.053

Table 5 (Continued)

Station Number		Along-Track Average ADCP Velocity m/s	Across-Track Average ADCP Velocity m/s	Across-Track ADCP-GEOST Velocity m/s
48	49	-0.152	0.105	-0.014
49	50	-0.041	-0.028	-0.052
50	51	0.031	-0.041	-0.038
51	52	-0.078	-0.108	-0.088
52	53	0.032	-0.014	-0.008
53	54	0.140	-0.003	-0.025
54	55	0.067	0.051	-0.024
55	56	0.027	0.055	0.048
56	57	0.038	-0.038	0.060
57	58	-0.059	0.000	0.003
58	59	0.019	0.095	0.059
59	60	0.013	0.081	0.013
60	61	0.071	0.017	0.034
61	62	0.083	0.030	-0.036
62	63	0.094	0.000	0.030
63	64	0.115	0.062	-0.001
64	65	0.067	0.042	0.030
65	66	0.040	-0.051	0.001
66	67	0.091	0.004	-0.017
67	68	0.015	0.123	-0.006
68	69	0.013	-0.082	0.066
69	70	0.108	-0.099	-0.097
70	71	0.305	0.029	-0.014
71	72	0.188	0.044	-0.057
72	73	0.218	-0.089	-0.033
73	74	0.103	0.023	-0.022
74	75	-0.065	-0.016	-0.003
75	76	0.017	-0.078	-0.040
76	77	0.071	-0.106	-0.010
77	78	-0.035	0.132	0.021
78	79	0.007	-0.074	-0.037
79	80	0.213	-0.074	0.026
80	81	0.360	0.175	-0.001
81	82	0.092	0.043	0.034
82	83	0.153	0.019	-0.019
83	84	-0.002	-0.044	0.048
84	85	0.020	-0.046	0.029
85	86	0.194	-0.023	-0.053
86	87	0.071	0.087	-0.017
87	88	0.067	0.075	0.034
88	89	0.057	0.031	0.028
89	90	0.022	0.037	0.005
90	91	0.018	-0.041	0.039

Table 5 (Continued)

Station Number		Along-Track Average ADCP Velocity m/s	Across-Track Average ADCP Velocity m/s	Across-Track ADCP-GEOST Velocity m/s
91	92	-0.097	0.101	0.037
92	93	-0.354	0.069	0.021
93	94	-0.129	-0.033	0.017
94	95	-0.179	-0.026	0.038
95	96	-0.076	0.079	0.038
96	97	0.106	0.020	0.057
97	98	0.245	0.069	0.011
98	99	0.121	0.068	0.055
99	100	0.102	0.147	0.062
100	101	0.328	0.078	-0.019
101	102	0.221	-0.015	0.024
102	103	-0.025	0.077	0.044
103	104	0.021	0.024	0.036
104	105	0.041	-0.094	0.026
105	106	0.055	-0.157	0.000

Figures 1-27

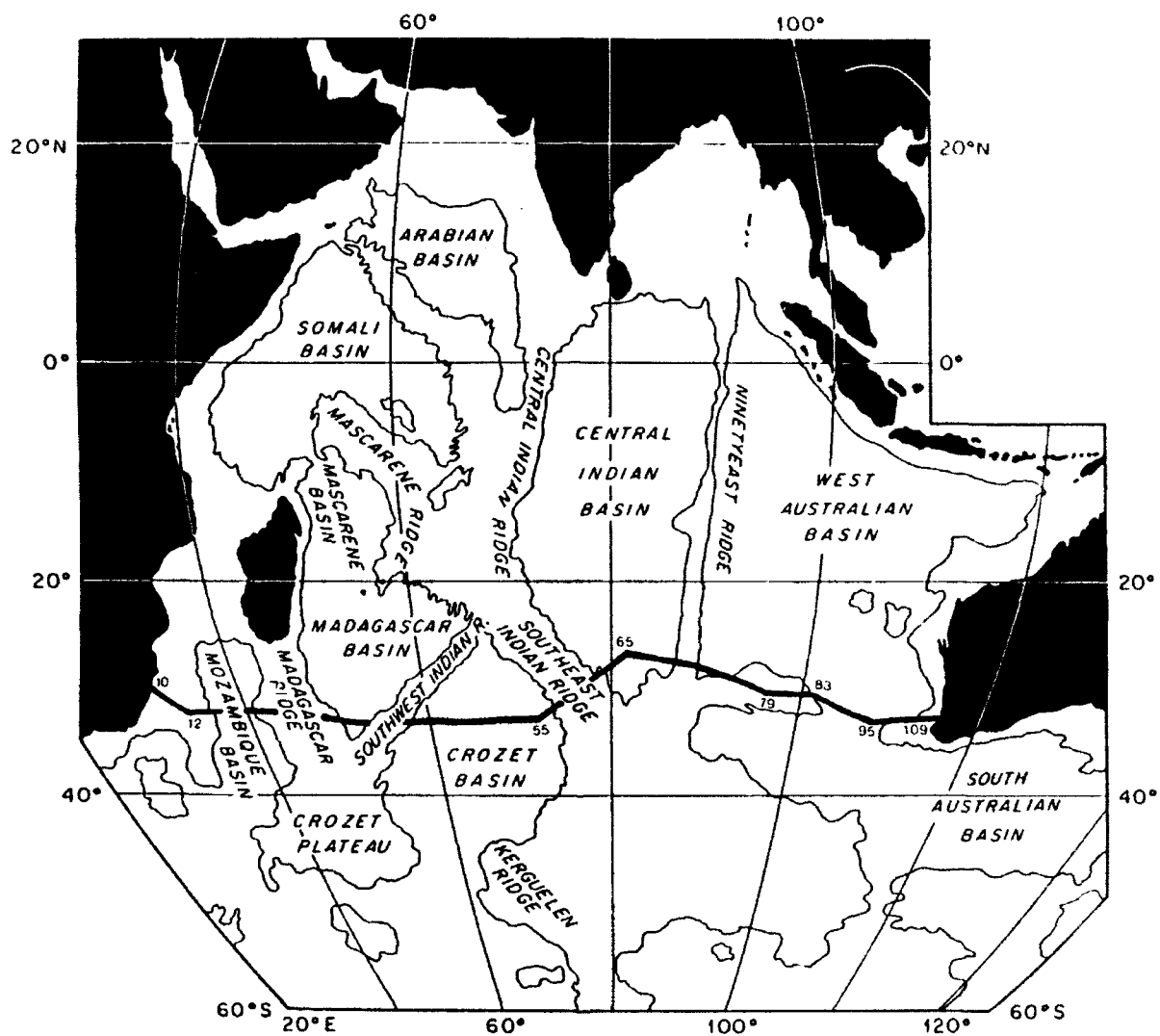
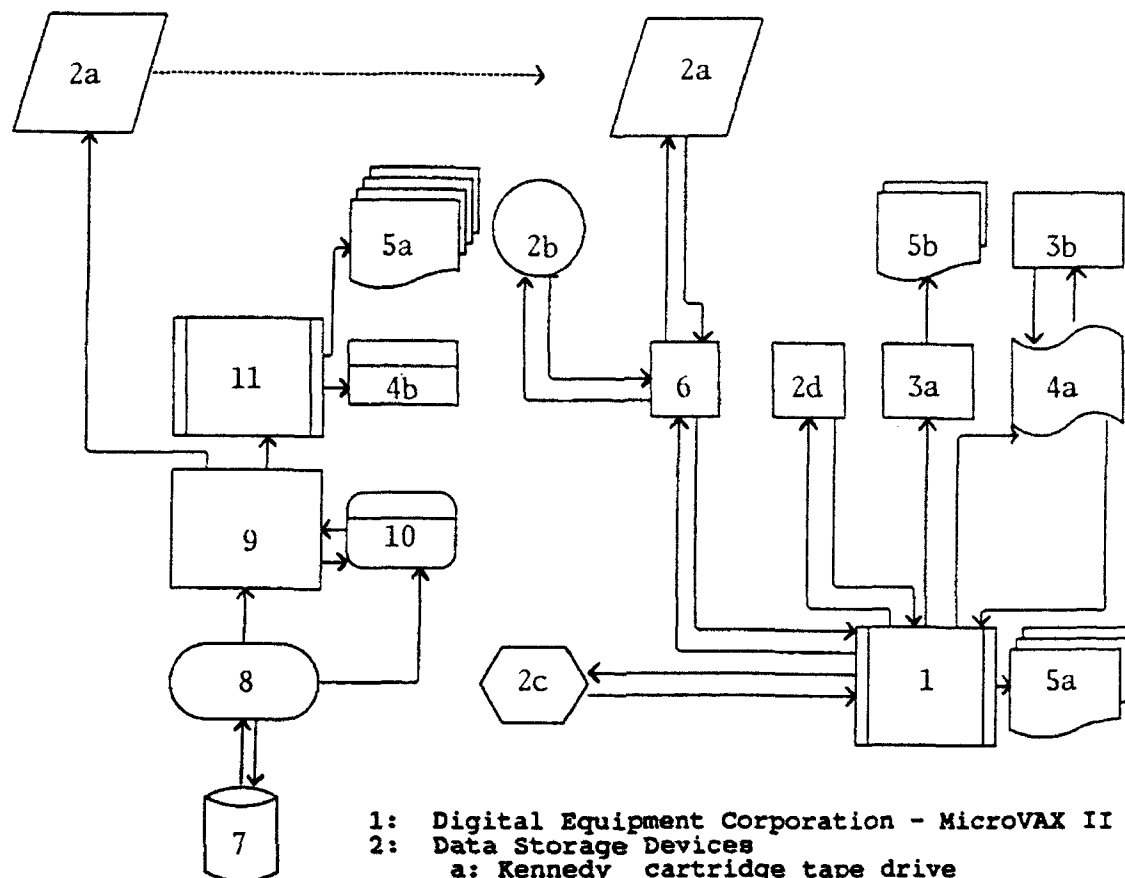


Figure 1: The trans-Indian Ocean cruise track and CTD station locations of RRS *Charles Darwin* cruise #29 from Africa to Australia. Note the many ridges and basins traversed by the cruise track.

CTD DATA ACQUISITION ... AND ... PROCESSING SYSTEMS



- 1: Digital Equipment Corporation - MicroVAX II
- 2: Data Storage Devices
 - a: Kennedy cartridge tape drive
 - b: Digidata 9 track tape drive
 - c: DEC TK50 cartridge tape drive
 - d: DEC RX50 floppy disk drive
- 3: CRT Terminals
 - a: Ampex 219 system terminal
 - b: VT100 user graphics terminal
- 4: Plotters
 - a: Zeta Corporation Zeta-8 plotter
 - b: Hewlett Packard HP 7475A plotter
- 5: Printers
 - a: Epson FX-85 system printer
 - b: Hewlett Packard Thinkjet image printer
- 6: RS232 switch box : 9T to Cartridge tape
- 7: NBIS CTD/O2 sensors #8 and #9
- 8: Rosette firing deck unit
- 9: NBIS Model 1150 CTD deck unit
- 10: Tascam audio tape recorder
- 11: Hewlett Packard HP-85 Personal computer

Figure 2: Block diagrams of the CTD data collection and processing systems employed on the RRS *Charles Darwin* trans-Indian cruise.

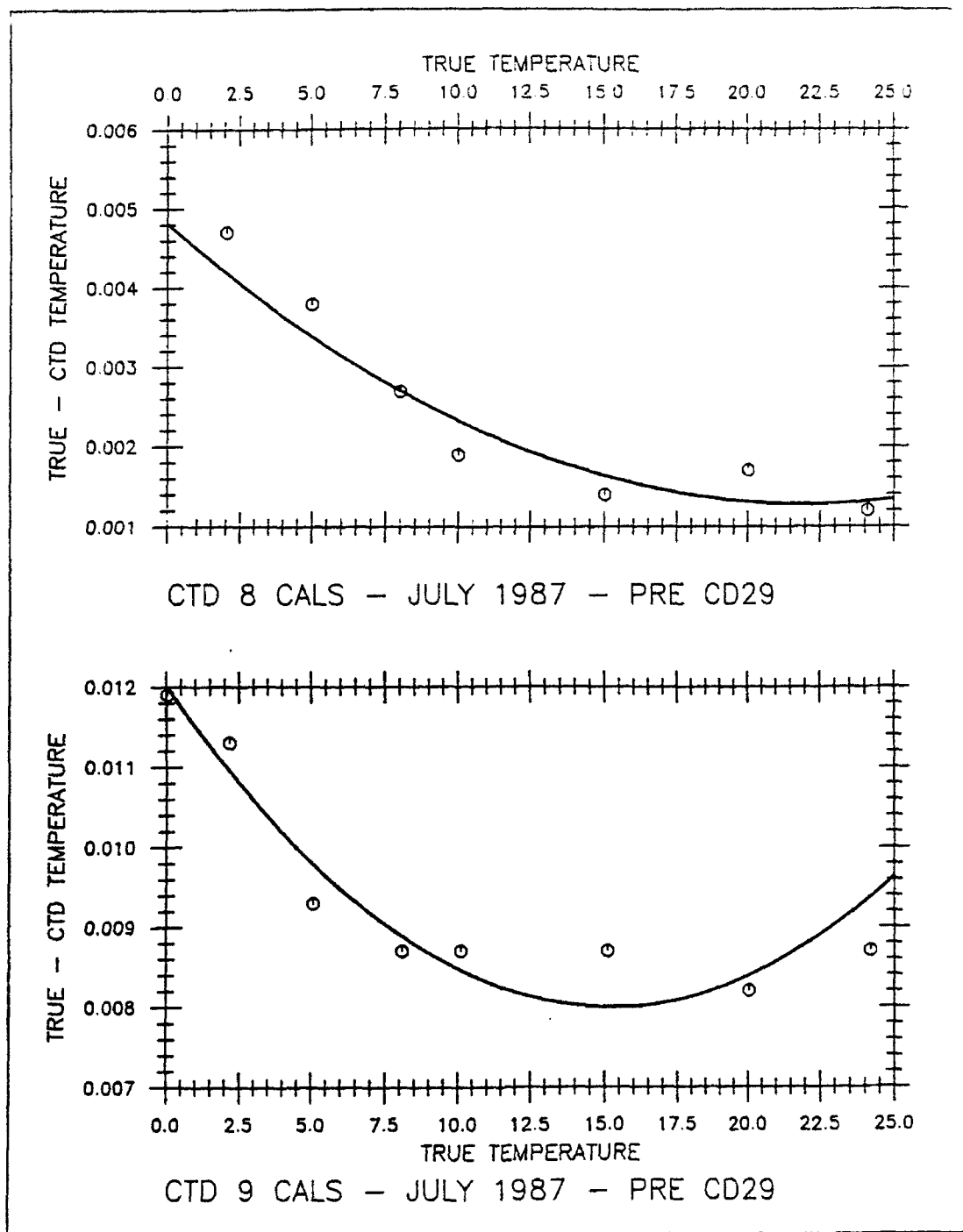


Figure 3: Laboratory calibration data for the CTD temperature sensors along with quadratic least-square fits to the data used to reduce the CTD data.

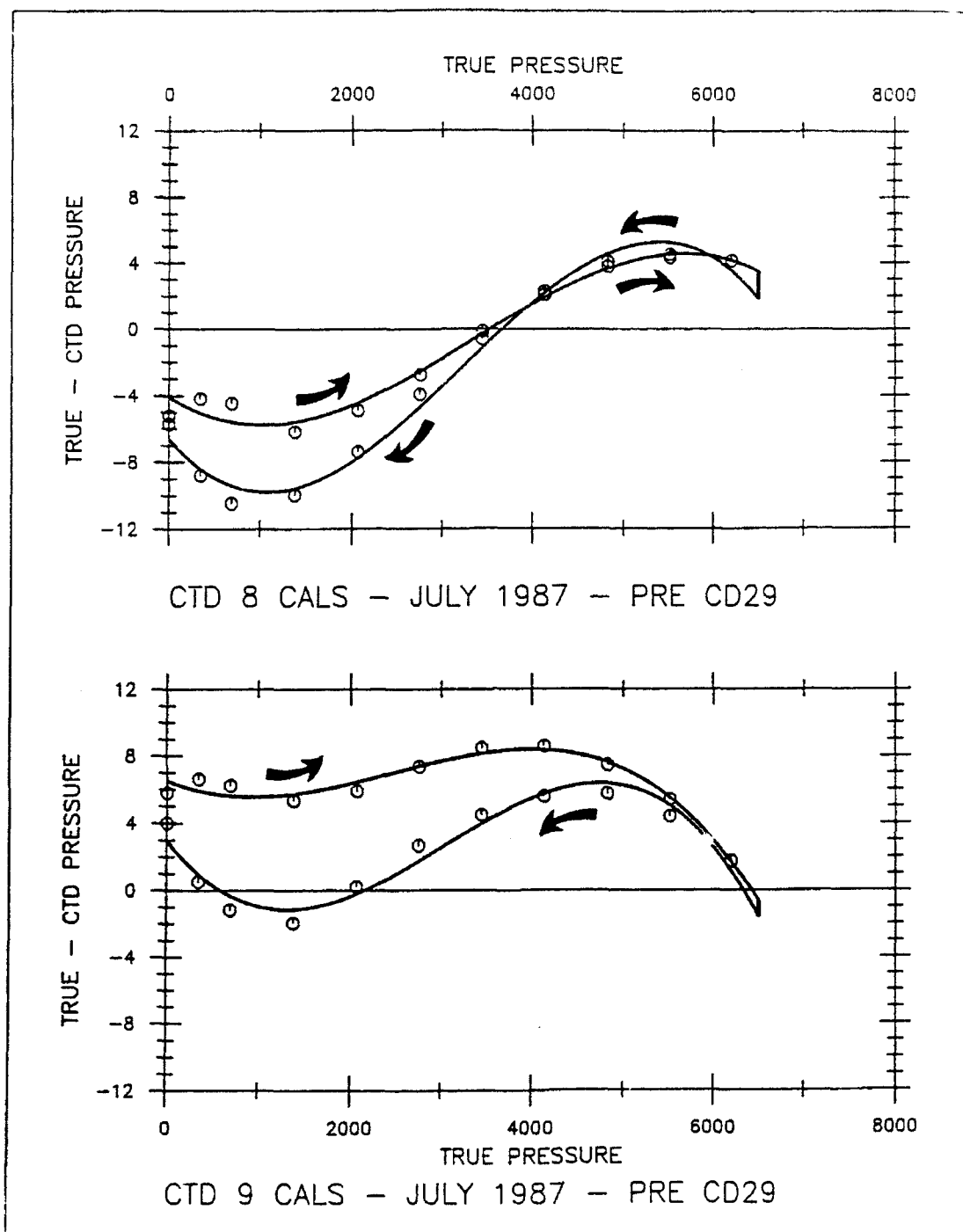


Figure 4: Laboratory calibration data for the CTD pressure sensors along with cubic least-square fits to the data used to reduce the CTD data.

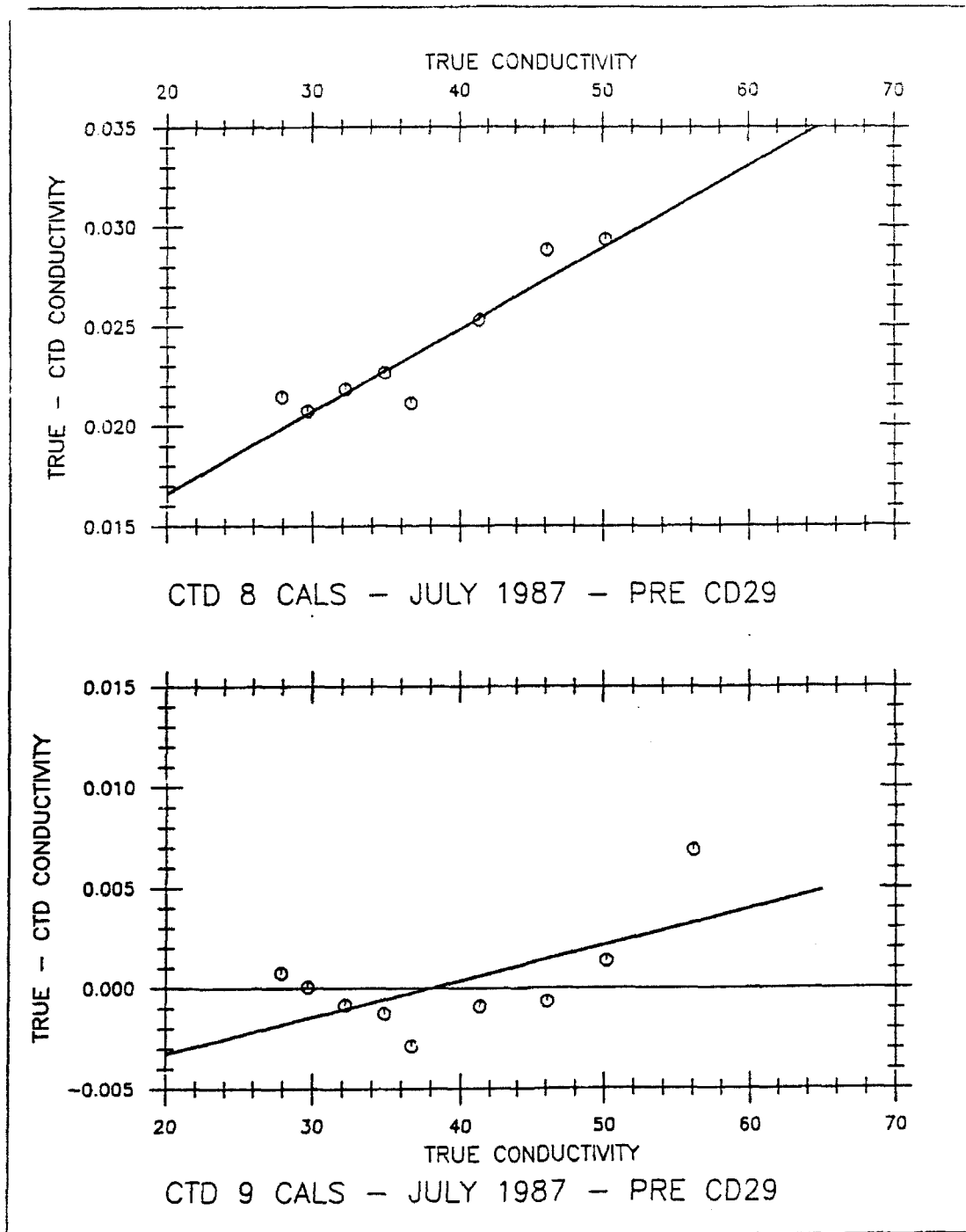


Figure 5: Laboratory calibration data for the CTD conductivity sensors along with linear least-square fits to the data used to reduce the CTD data.

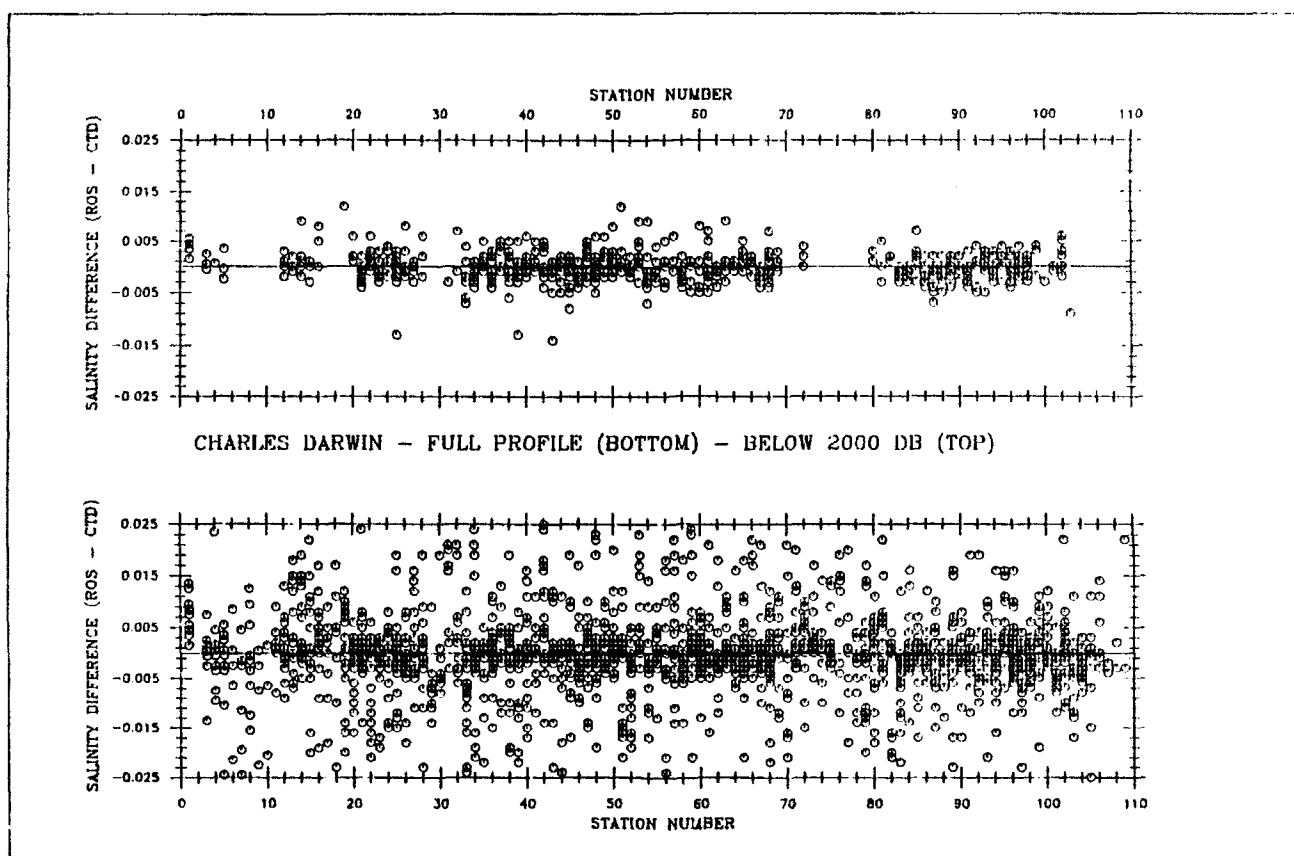


Figure 6: Below: Differences between calibrated CTD salinity data and associated rosette data over the entire ocean profile: RRS *Charles Darwin* cruise #29. Above: Differences between deep (greater than 2000 db) calibrated CTD salinity data and associated rosette data: RRS *Charles Darwin* cruise #29.

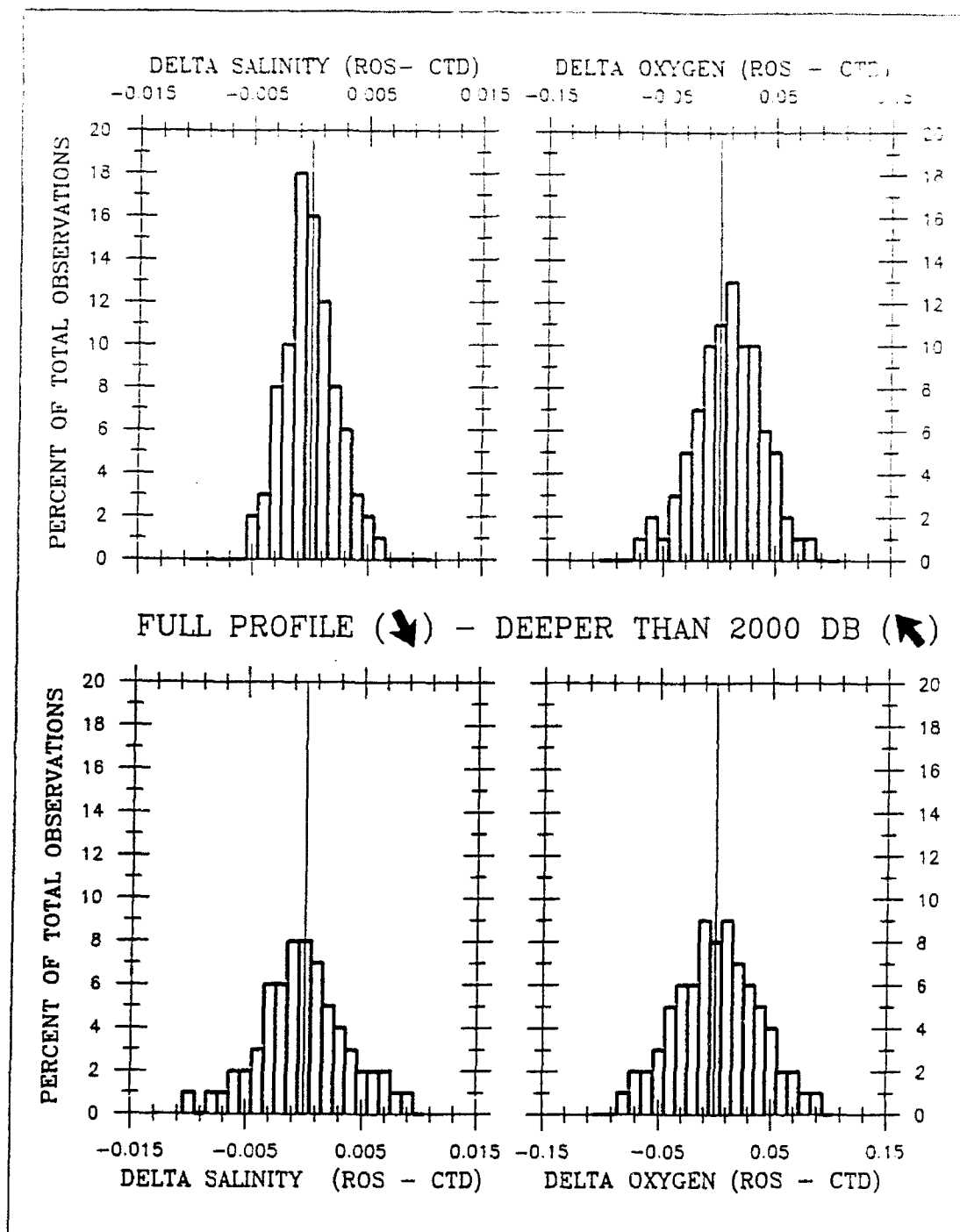


Figure 7: Histograms showing the distribution of the salt and oxygen differences (CTD vs. rosette samples) for: Below: all stations at all depths. Above: all stations at depths greater than 2000 db.

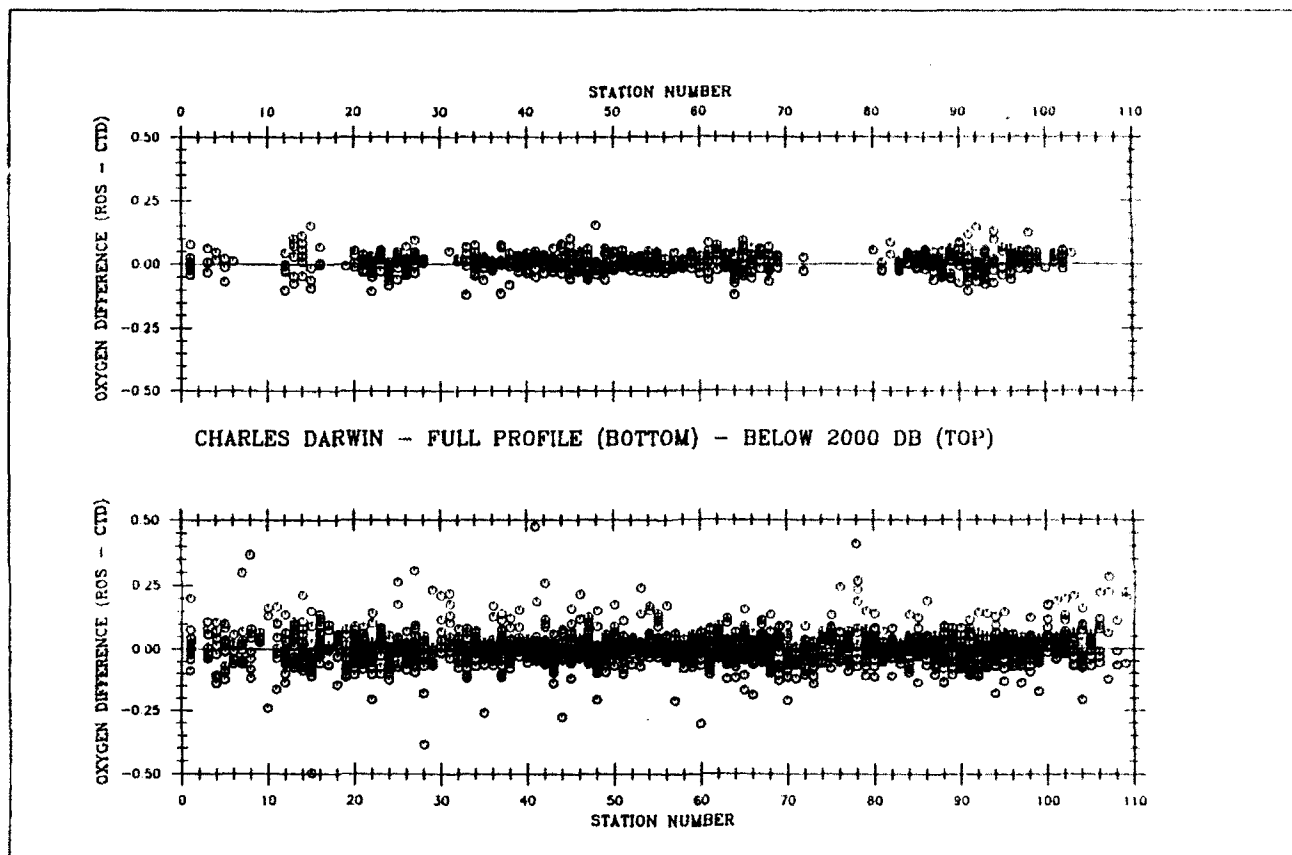


Figure 8: Below: Differences between calibrated CTD oxygen data and associated rosette data over the entire ocean profile: RRS *Charles Darwin* cruise #29. Above: Differences between deep (greater than 2000 db) calibrated CTD oxygen data and associated rosette data: RRS *Charles Darwin* cruise #29.

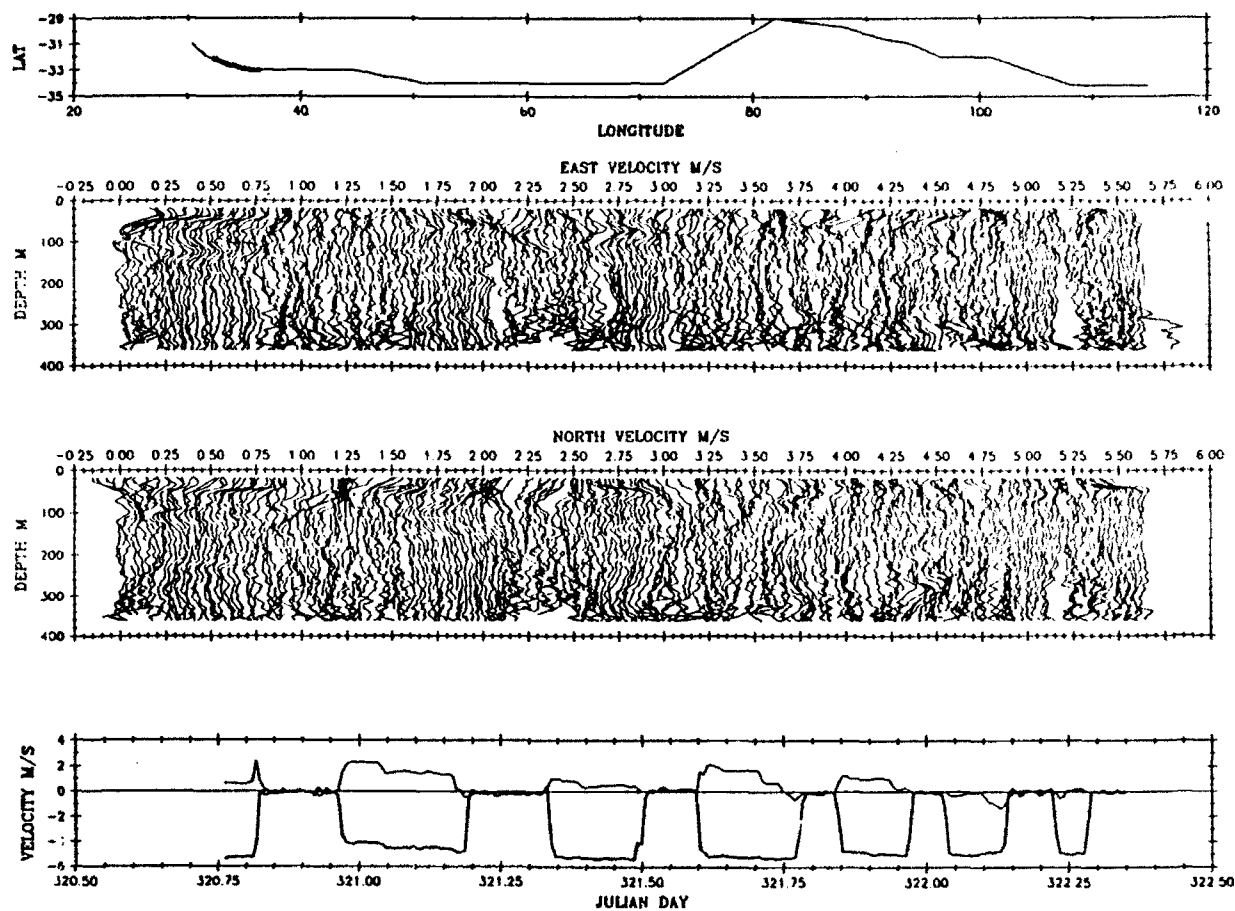


Figure 9: (a) Representative displays of the Acoustic Doppler Current Profiler data obtained on the trans-Indian cruise. Four subsections of the data set are presented (Figures 9a, b, c, and d). In each case, the top panel denotes with bold line where along the cruise track the data were collected. Panels 2 and 3 contain the relative east and north velocity profiles in "waterfall" format where successive profiles are offset to the right. The profiles were biased to have zero vertical mean. The bottom panels give the east (bold line) and north (thin line) components of the depth-averaged relative velocity.

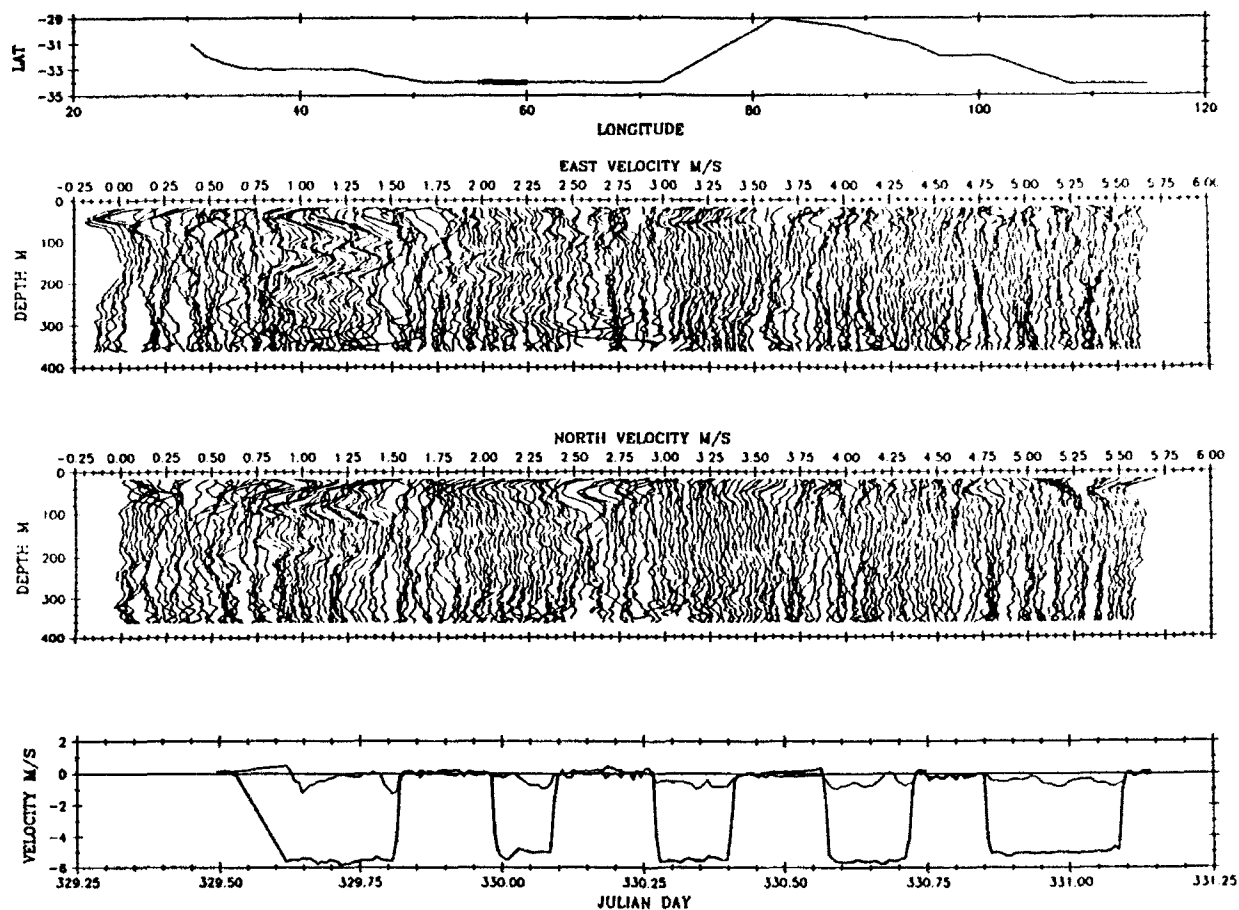


Figure 9: (b) Representative displays of the Acoustic Doppler Current Profiler data obtained on the trans-Indian cruise. Four subsections of the data set are presented (Figures 9a, b, c, and d). In each case, the top panel denotes with bold line where along the cruise track the data were collected. Panels 2 and 3 contain the relative east and north velocity profiles in "waterfall" format where successive profiles are offset to the right. The profiles were biased to have zero vertical mean. The bottom panels give the east (bold line) and north (thin line) components of the depth-averaged relative velocity.

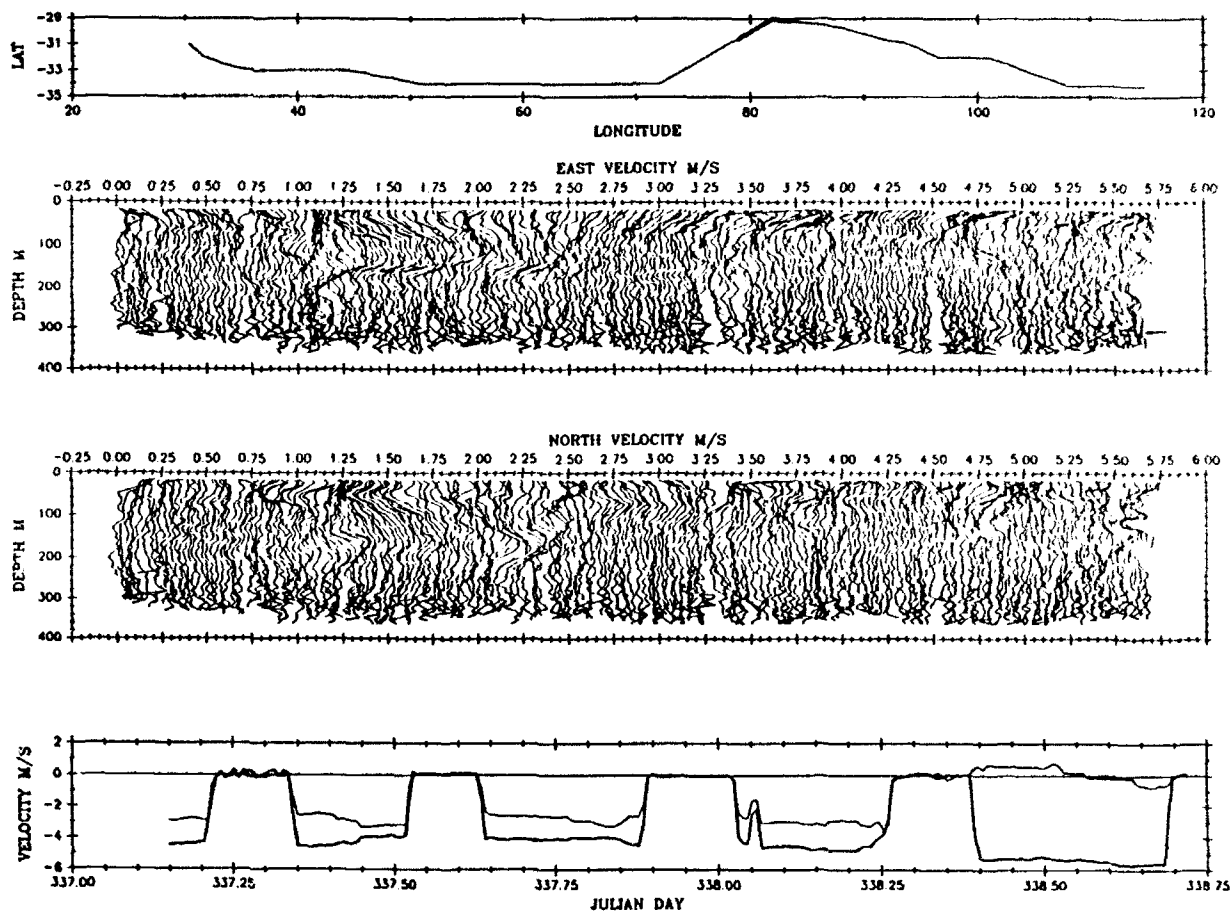


Figure 9: (c) Representative displays of the Acoustic Doppler Current Profiler data obtained on the trans-Indian cruise. Four subsections of the data set are presented (Figures 9a, b, c, and d). In each case, the top panel denotes with bold line where along the cruise track the data were collected. Panels 2 and 3 contain the relative east and north velocity profiles in "waterfall" format where successive profiles are offset to the right. The profiles were biased to have zero vertical mean. The bottom panels give the east (bold line) and north (thin line) components of the depth-averaged relative velocity.

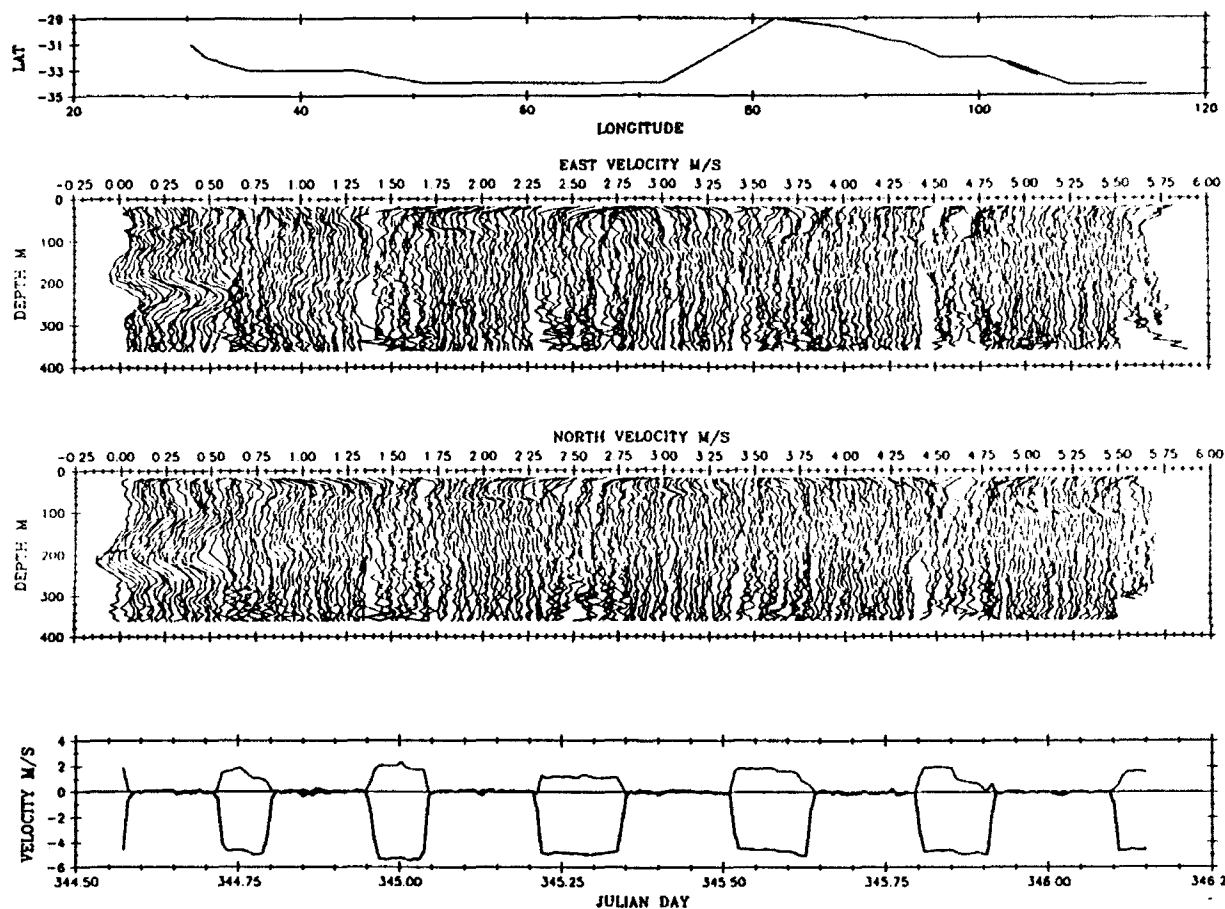


Figure 9: (d) Representative displays of the Acoustic Doppler Current Profiler data obtained on the trans-Indian cruise. Four subsections of the data set are presented (Figures 9a, b, c, and d). In each case, the top panel denotes with bold line where along the cruise track the data were collected. Panels 2 and 3 contain the relative east and north velocity profiles in "waterfall" format where successive profiles are offset to the right. The profiles were biased to have zero vertical mean. The bottom panels give the east (bold line) and north (thin line) components of the depth-averaged relative velocity.

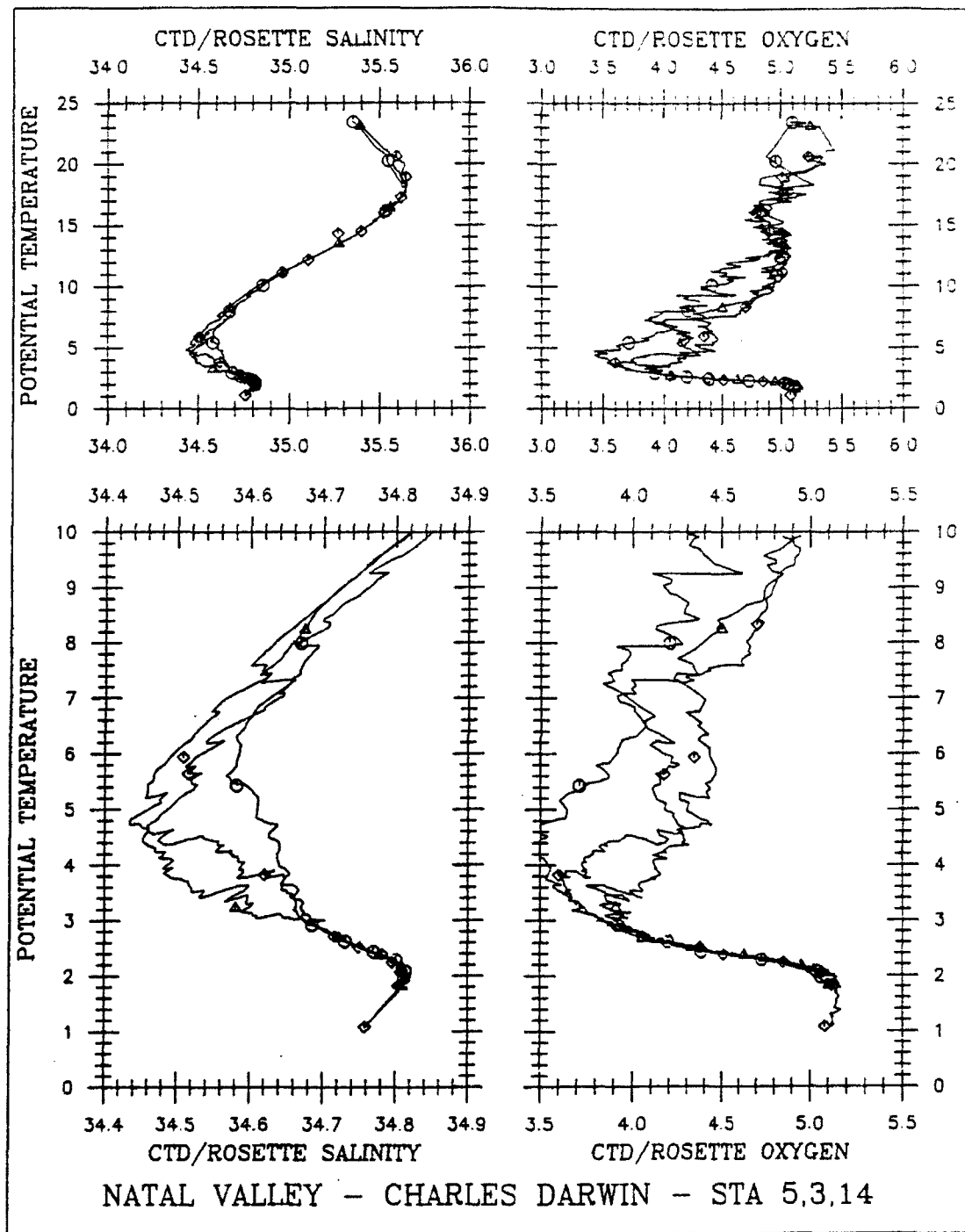


Figure 10: Typical potential temperature vs. salinity and oxygen plots from the Natal Valley during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

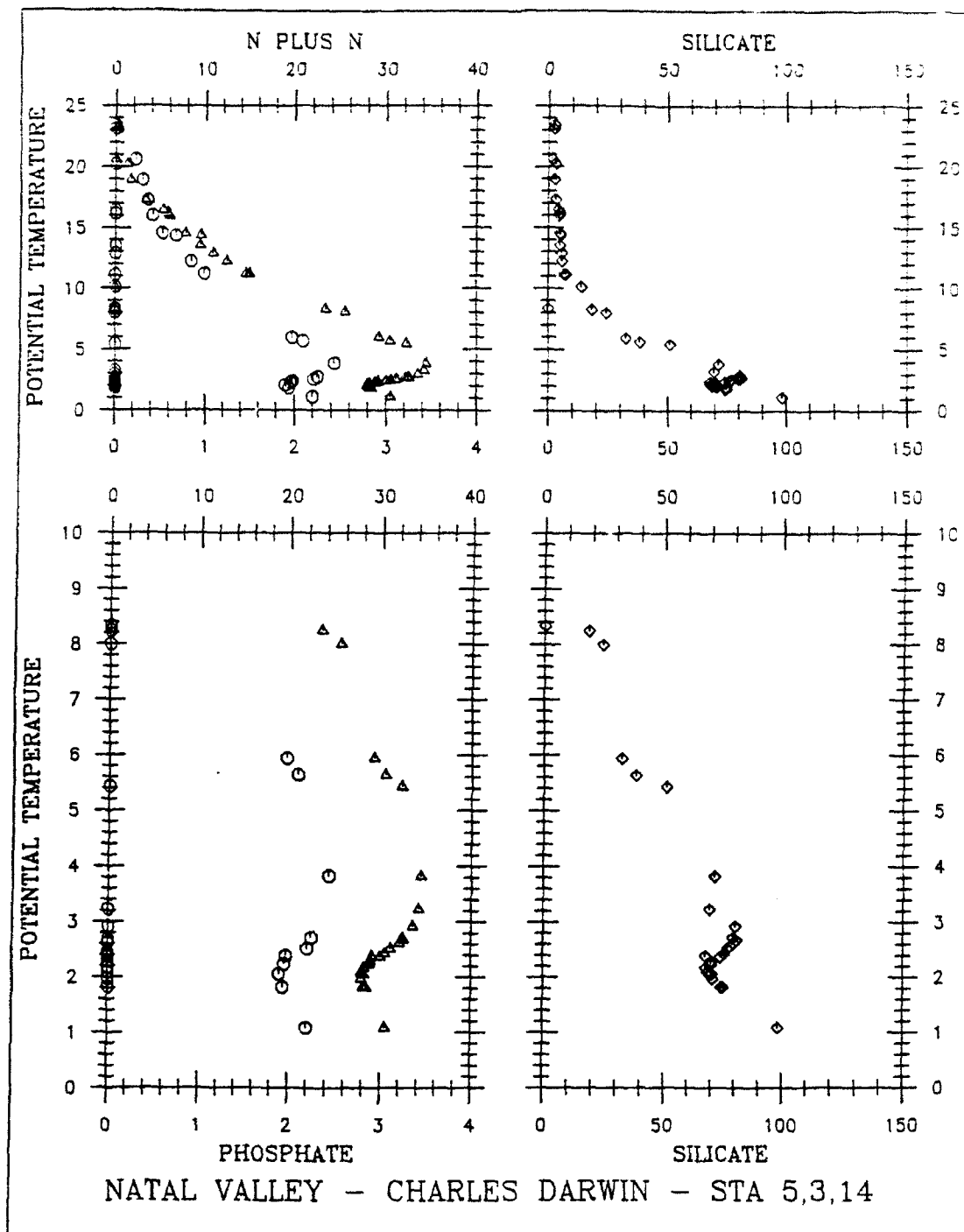


Figure 11: Typical potential temperature vs. nutrient data plots from the Natal Valley during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 10.

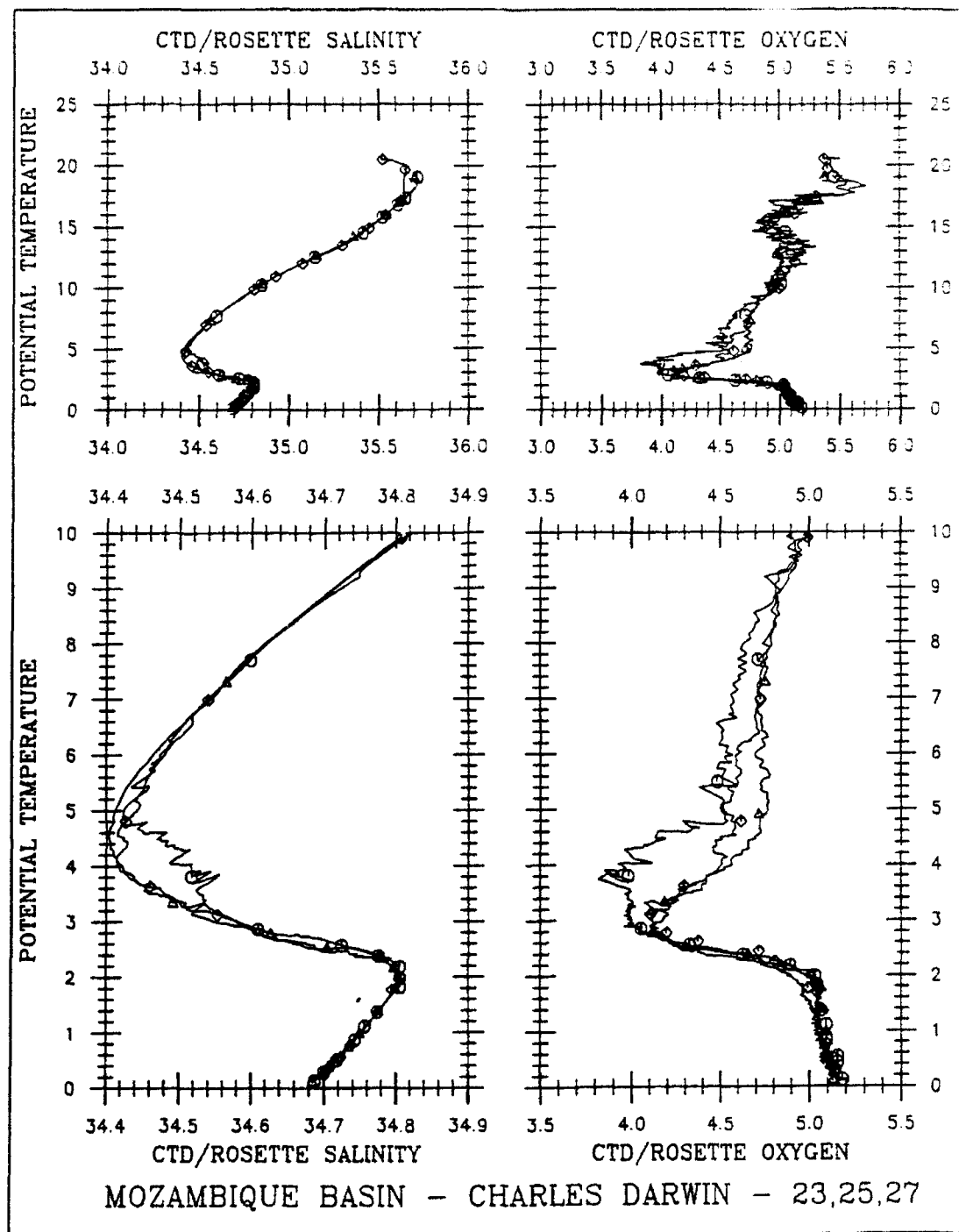


Figure 12: Typical potential temperature vs. salinity and oxygen plots from the Mozambique Basin during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

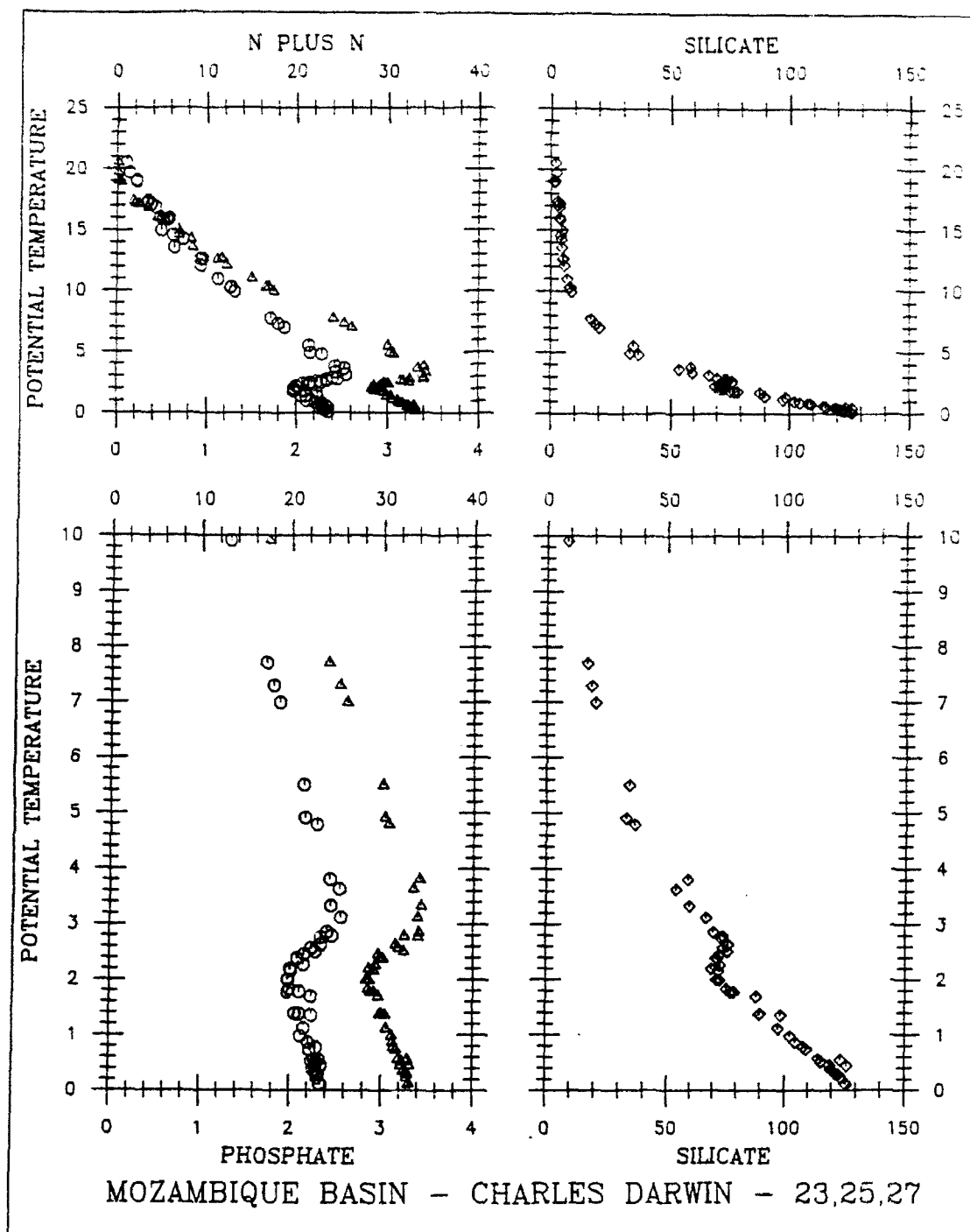


Figure 13: Typical potential temperature vs. nutrient data plots from the Mozambique Basin during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+P+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 12.

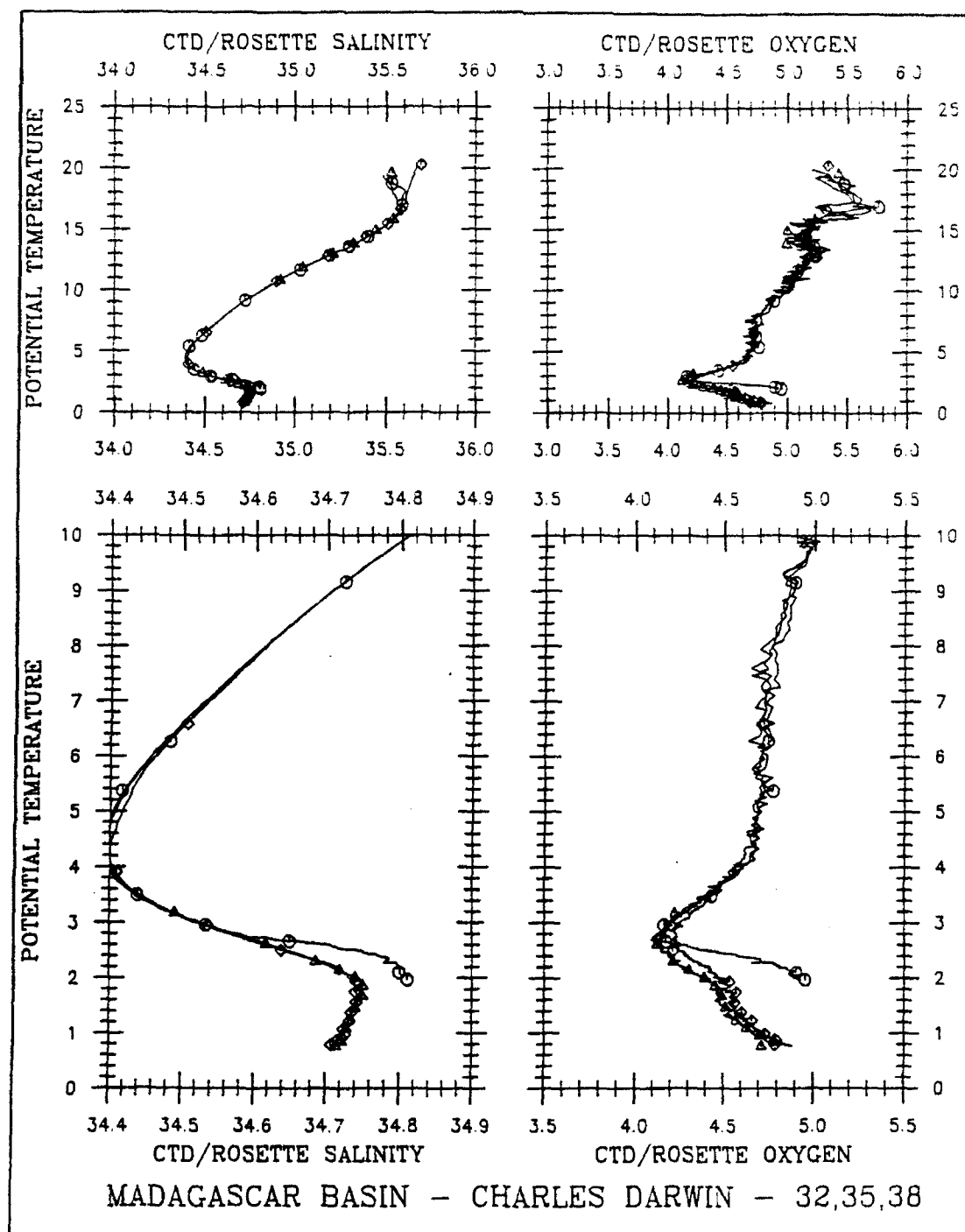


Figure 14: Typical potential temperature vs. salinity and oxygen plots from the Madagascar Basin during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

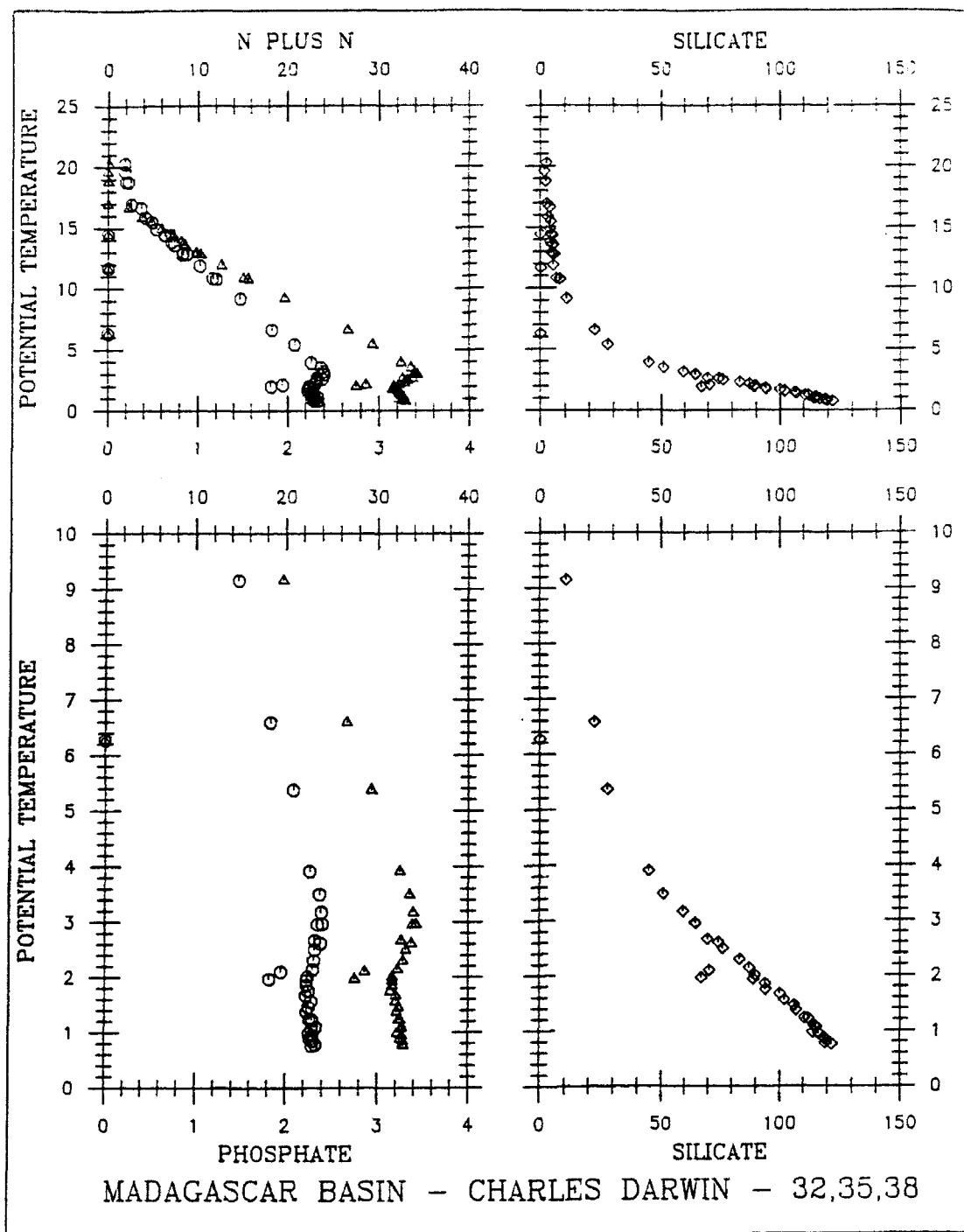


Figure 15: Typical potential temperature vs. nutrient data plots from the Madagascar Basin during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+P+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 14.

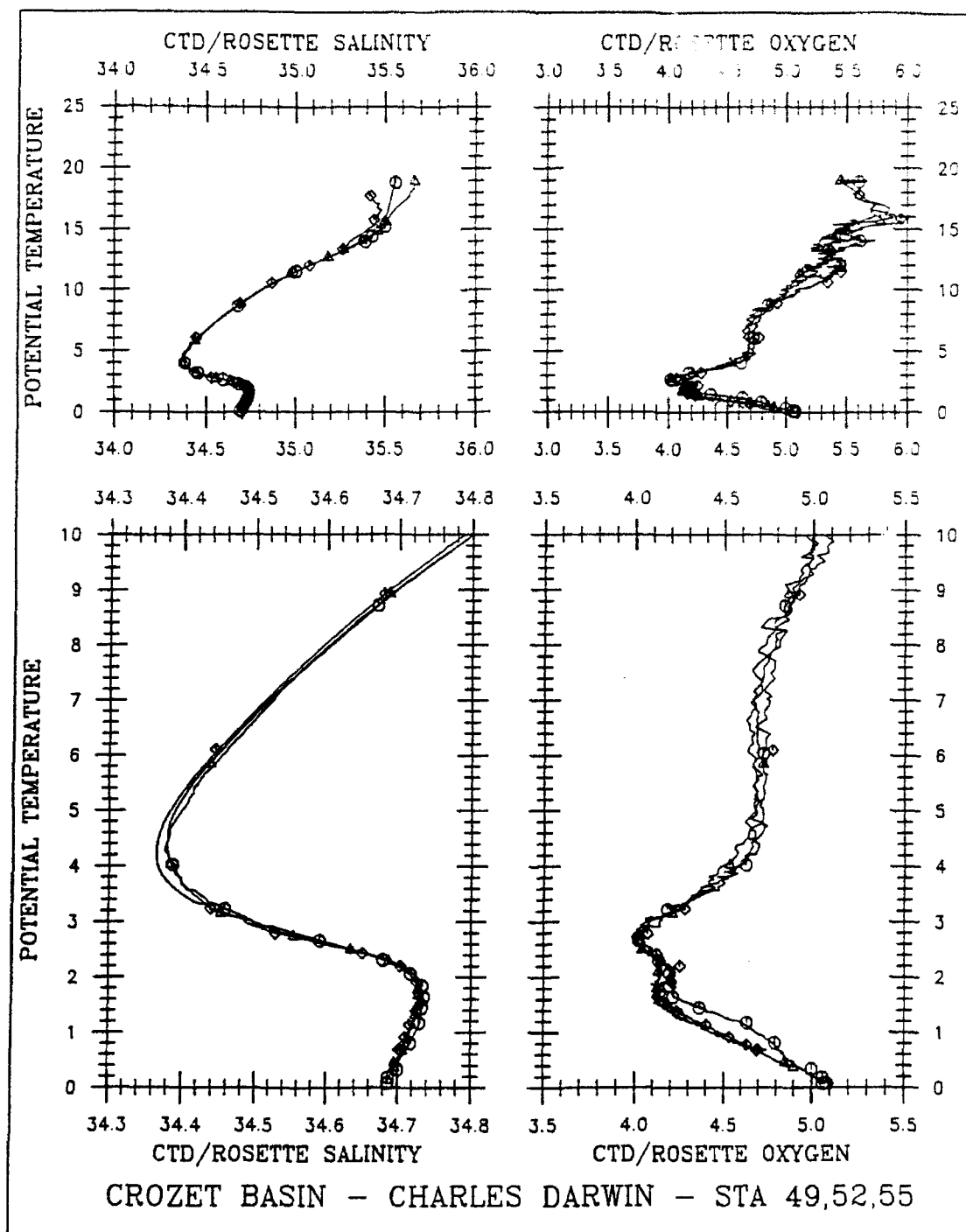


Figure 16: Typical potential temperature vs. salinity and oxygen plots from the Crozet Basin during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

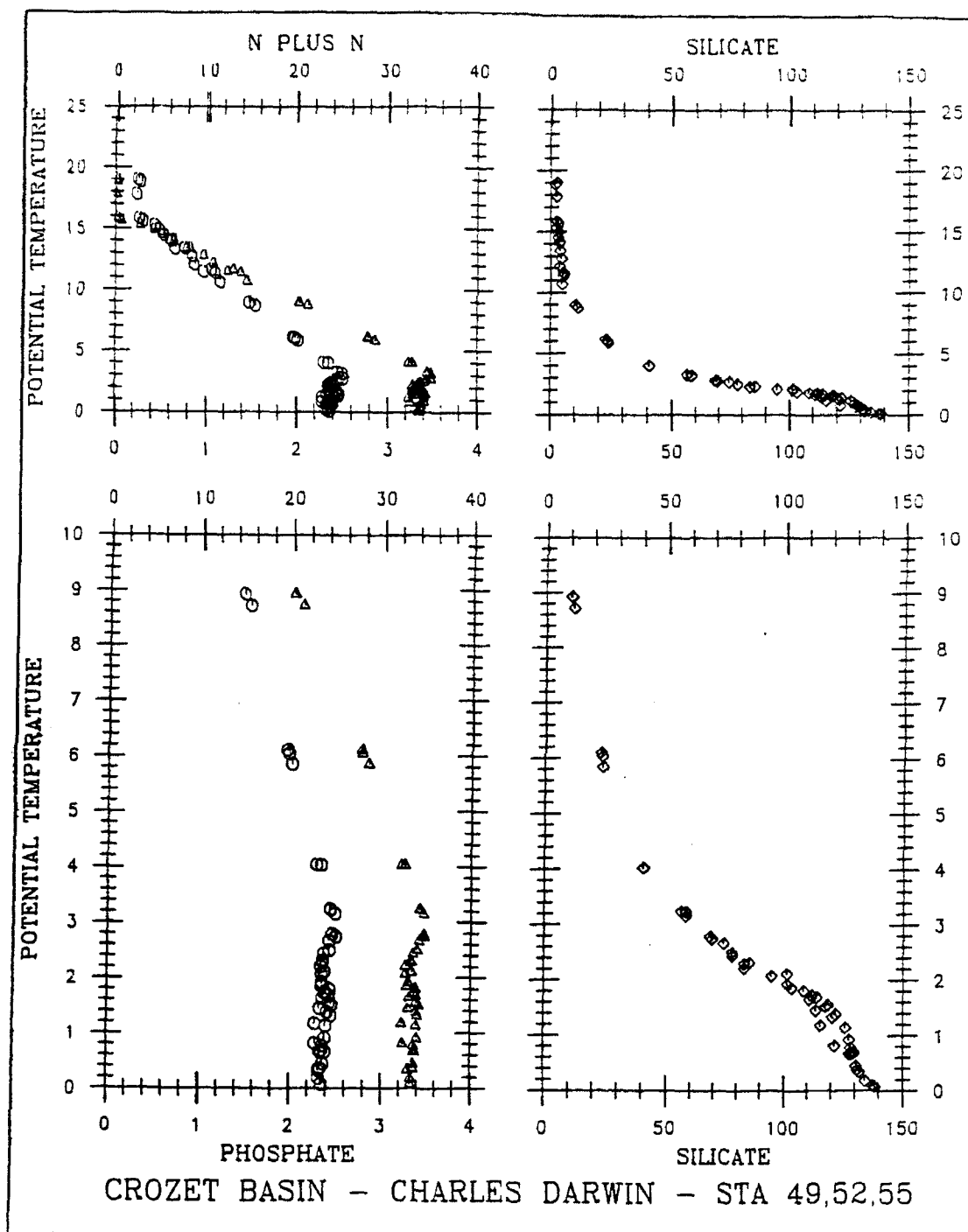


Figure 17: Typical potential temperature vs. nutrient data plots from the Crozet Basin during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 16.

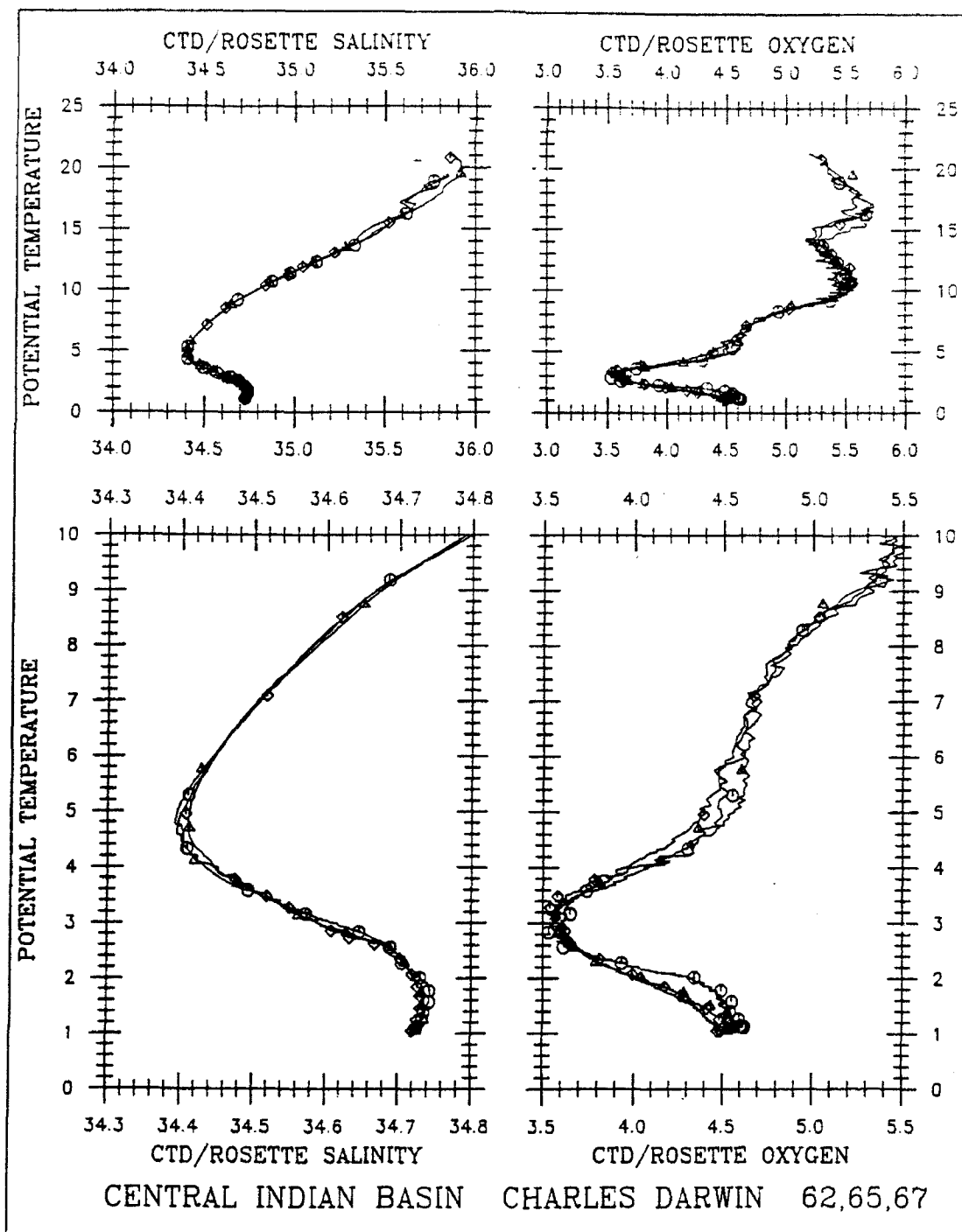


Figure 18: Typical potential temperature vs. salinity and oxygen plots from the Central Indian Basin during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

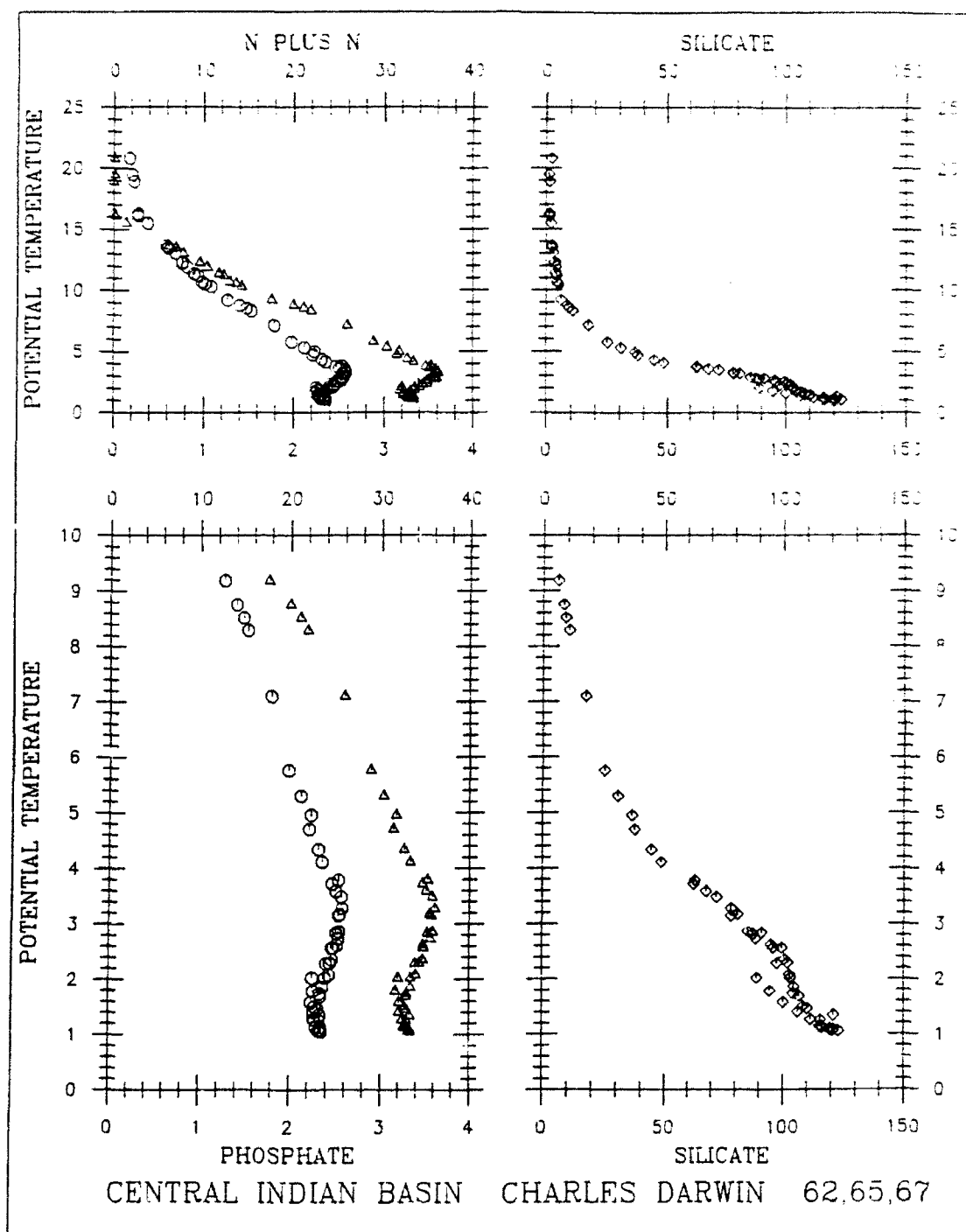


Figure 19: Typical potential temperature vs. nutrient data plots from the Central Indian Basin during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 18.

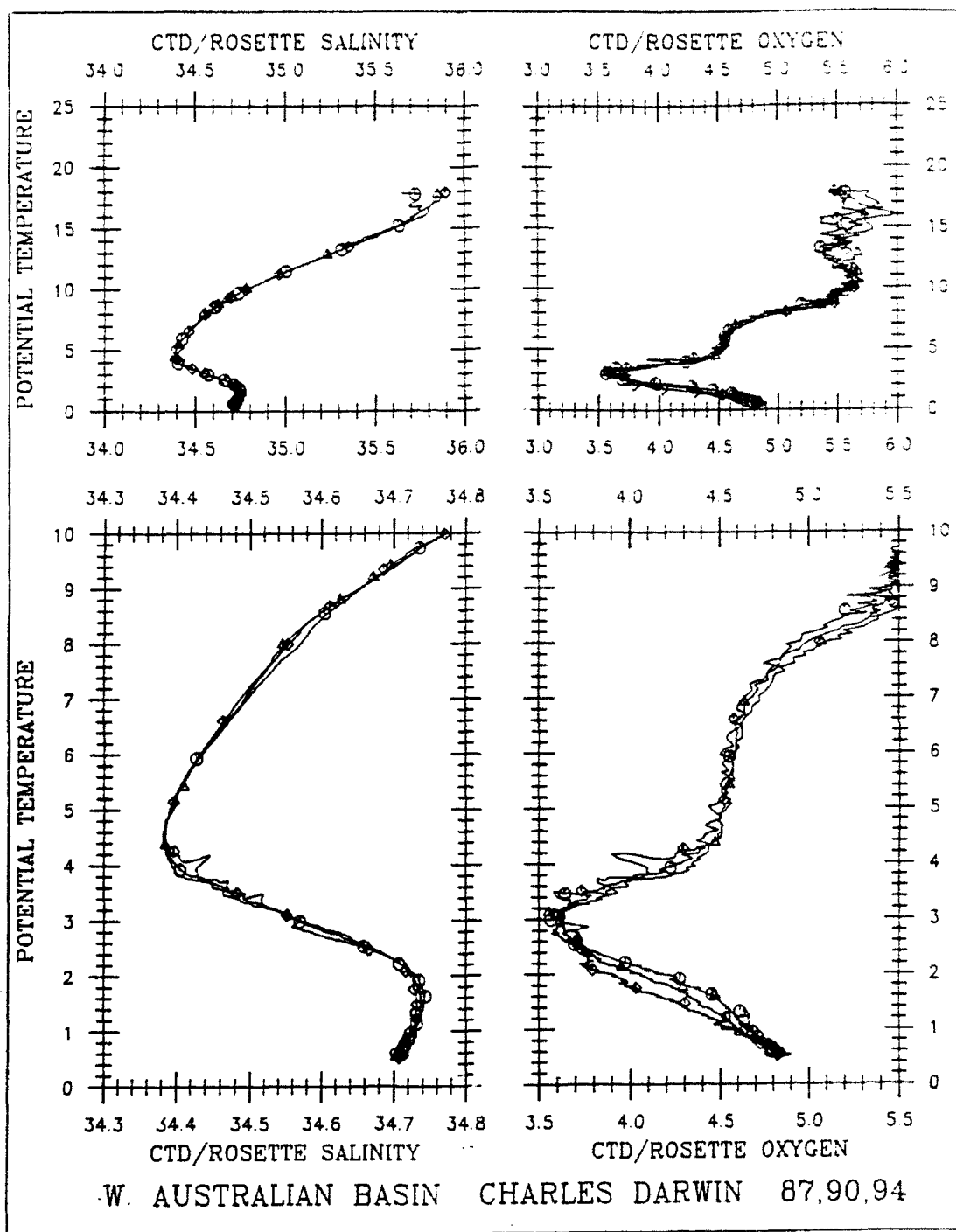


Figure 20: Typical potential temperature vs. salinity and oxygen plots from the West Australian Basin during RRS *Charles Darwin* cruise #29. Symbols represent rosette water sample data for those particular casts. The bottom plots are expanded scale to show deep θ /property consistency.

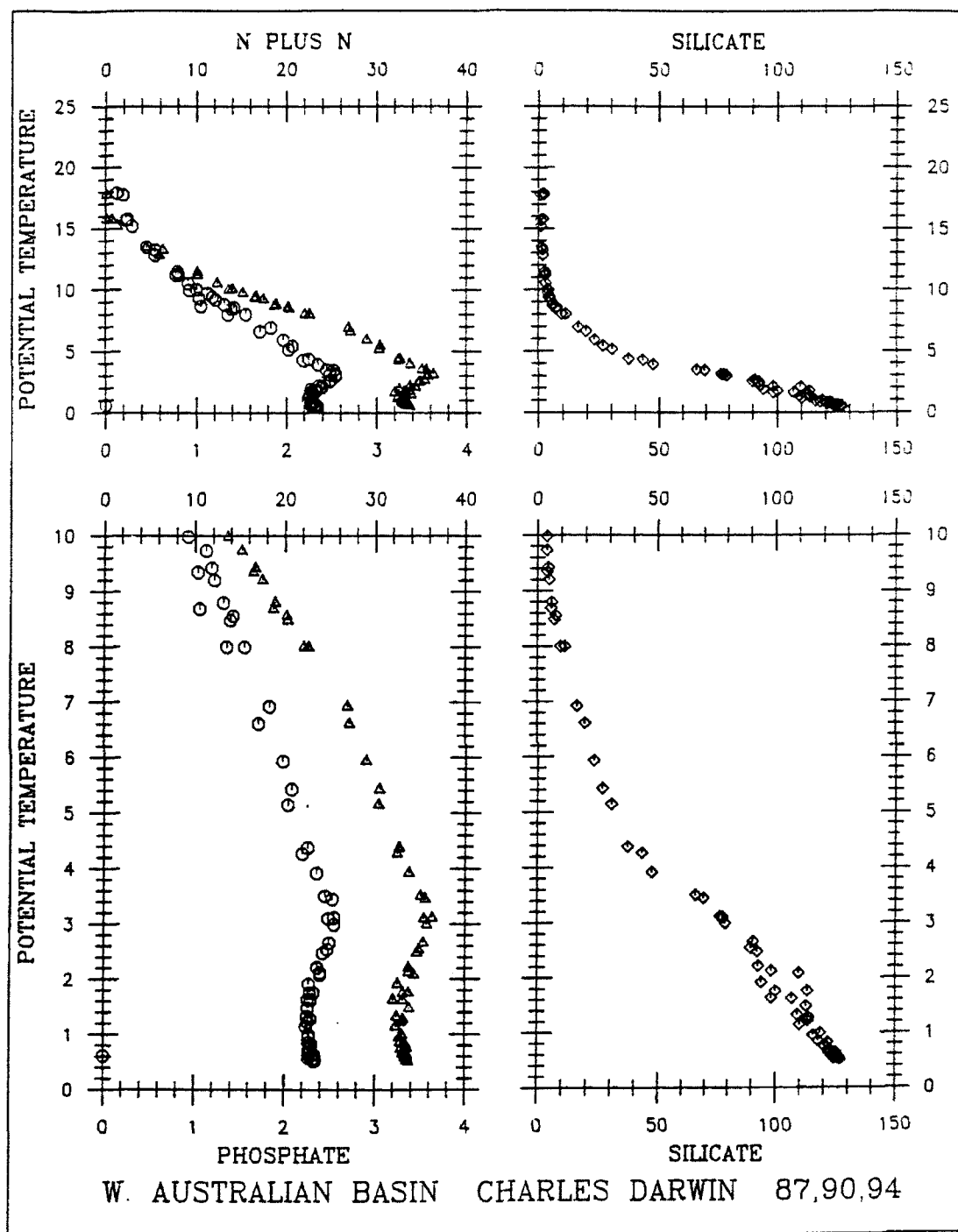


Figure 21: Typical potential temperature *vs.* nutrient data plots from the West Australian Basin during RRS *Charles Darwin* cruise #29. Phosphate data are represented by triangles, N+N by circles, and silicate by diamonds. The ordinates (potential temperature axes) are at the same scales as Figure 20.

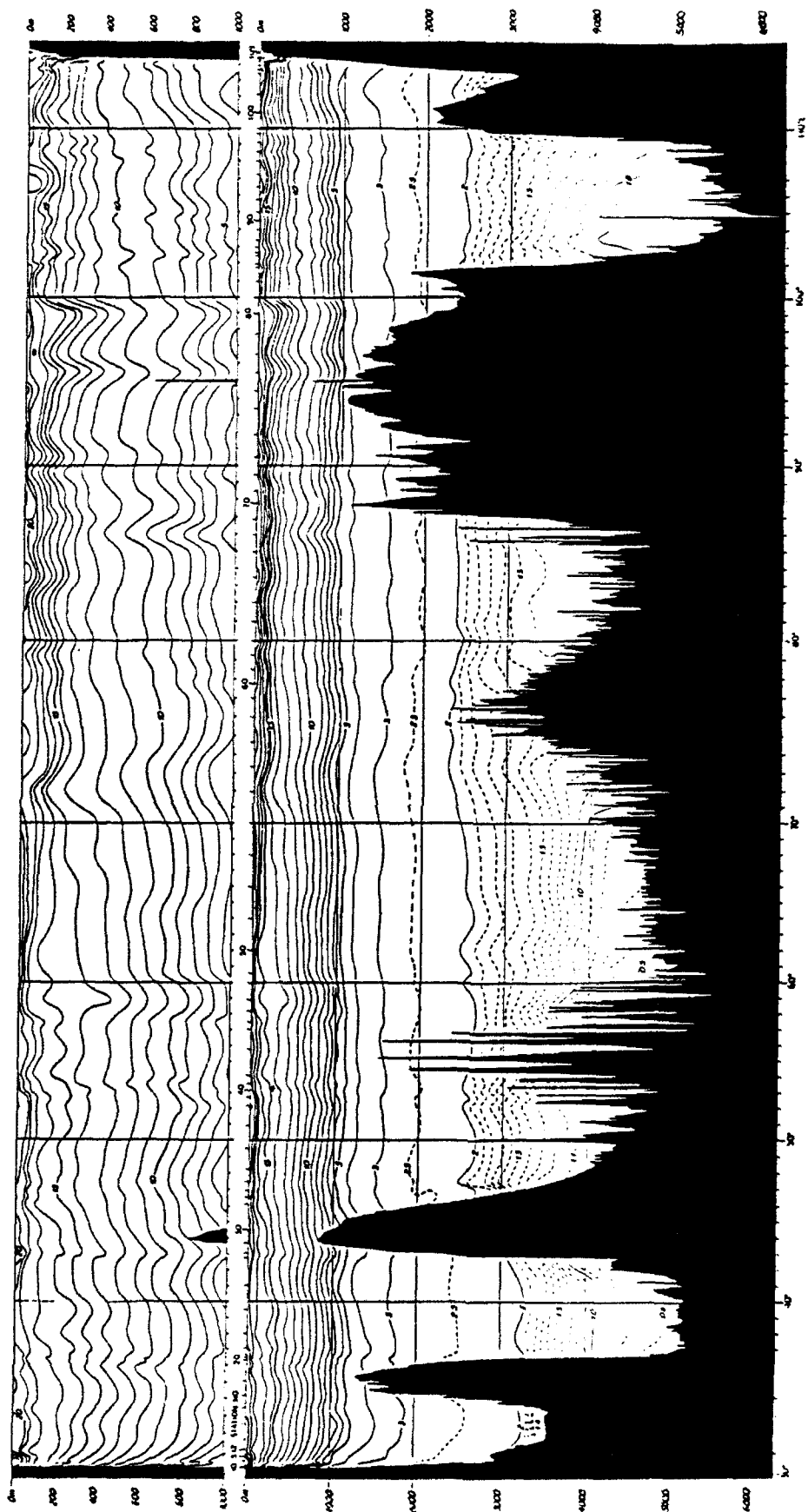


Figure 22: Temperature vs. depth section of trans-Indian Ocean sect... Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

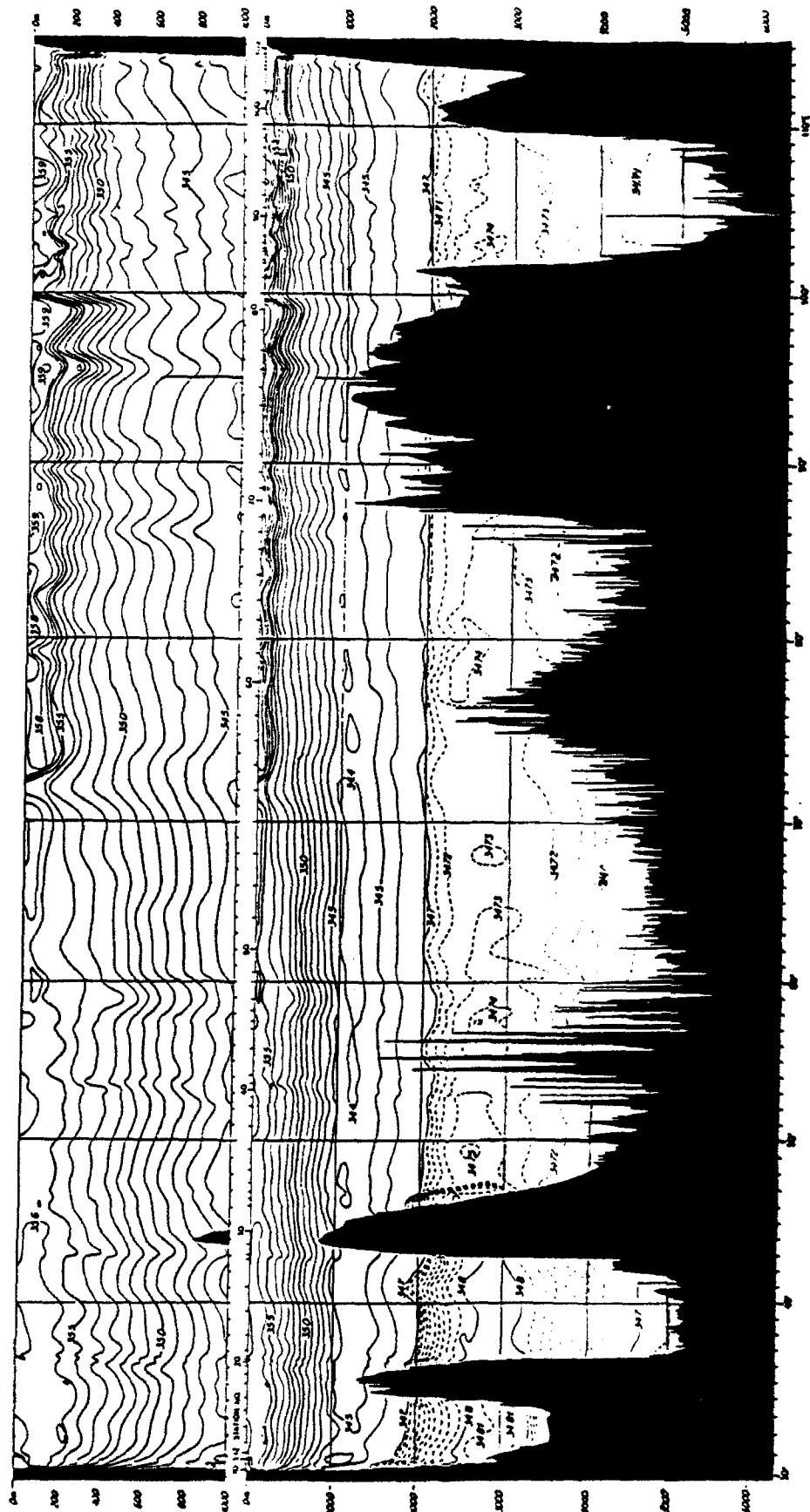


Figure 23: Salinity vs. depth section of trans-Indian Ocean section. Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

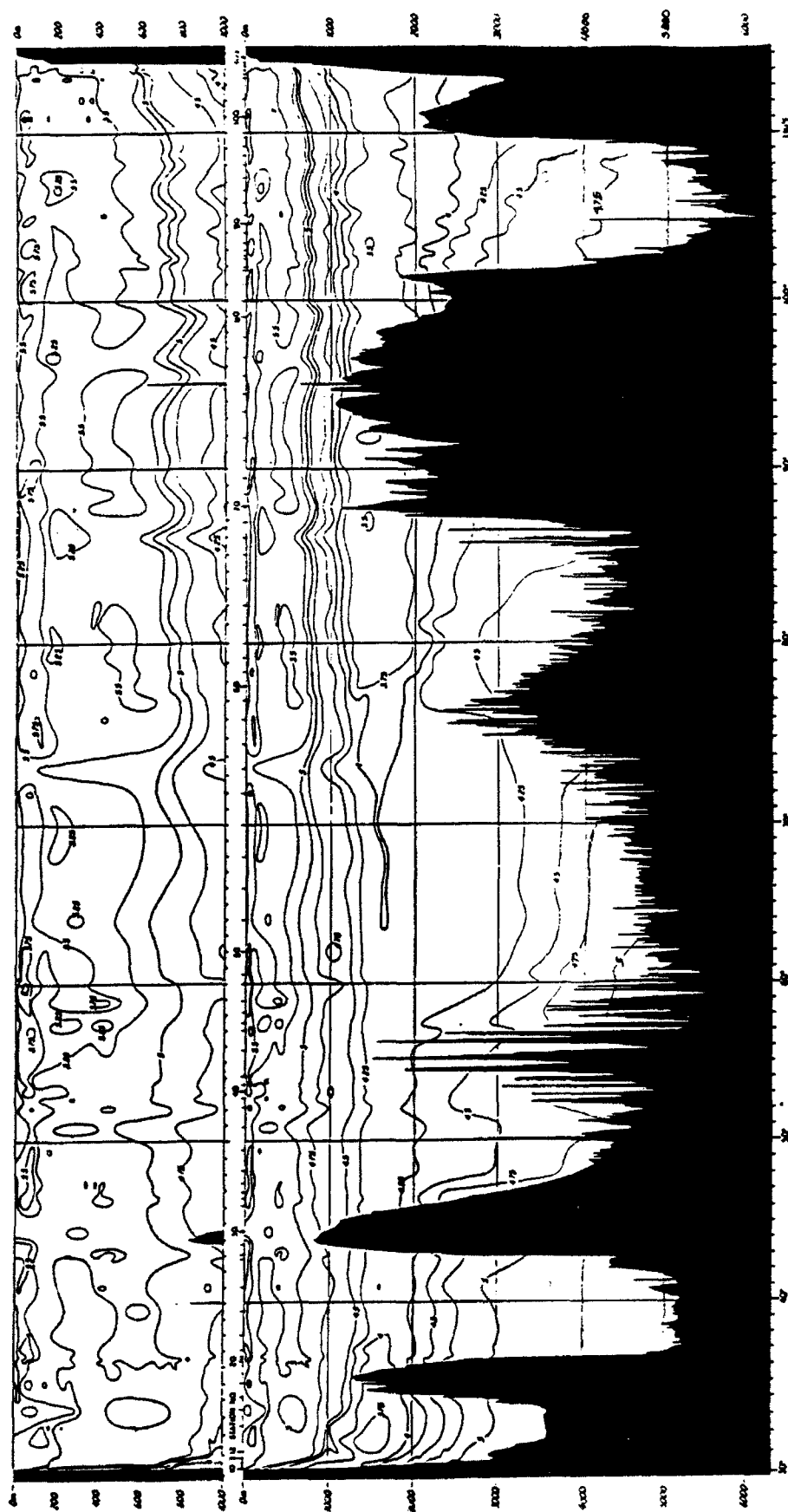


Figure 24: Oxygen vs. depth section of trans-Indian Ocean section. Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

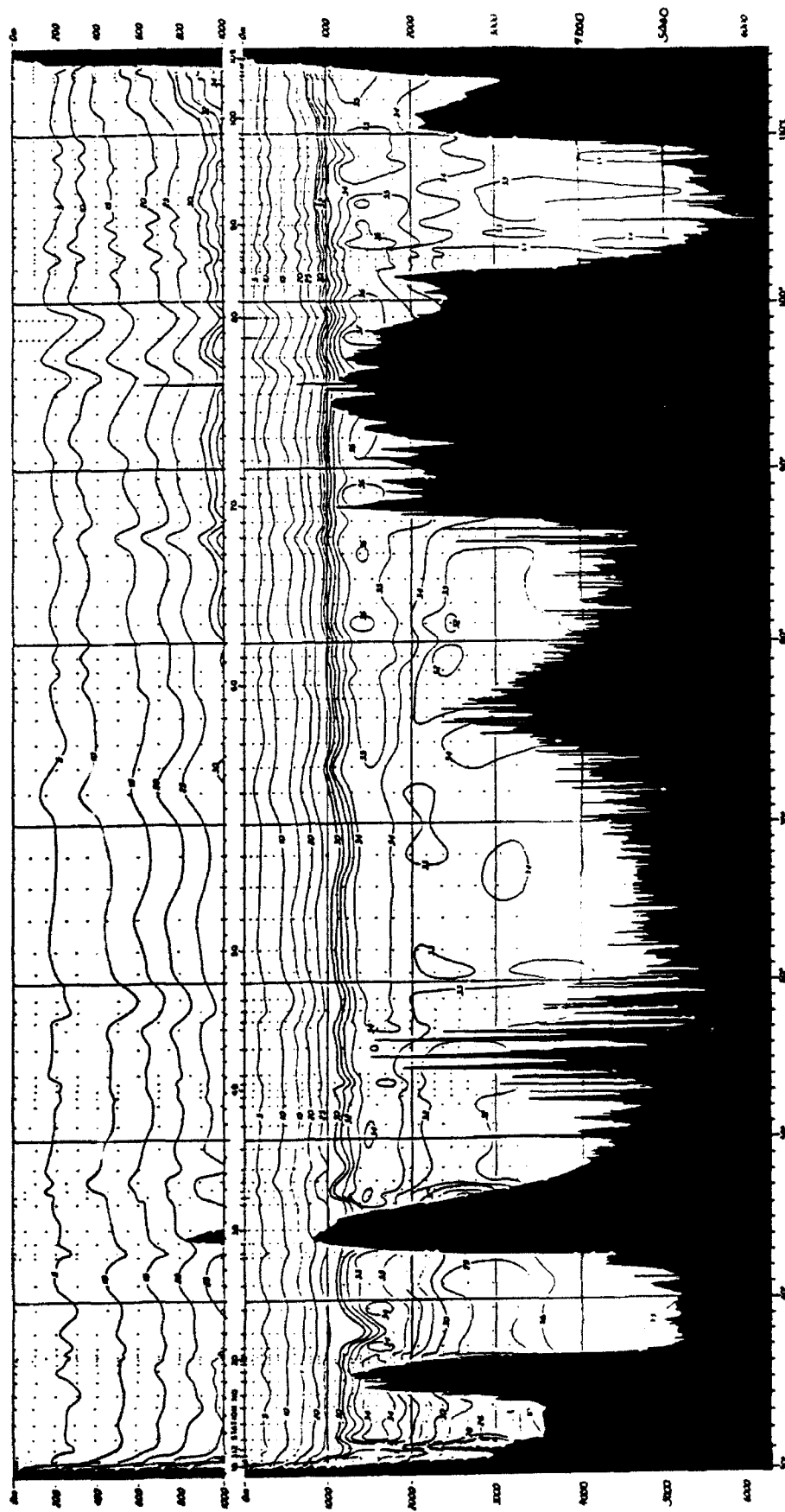


Figure 25: Nitrate vs. depth section of trans-Indian Ocean section. Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

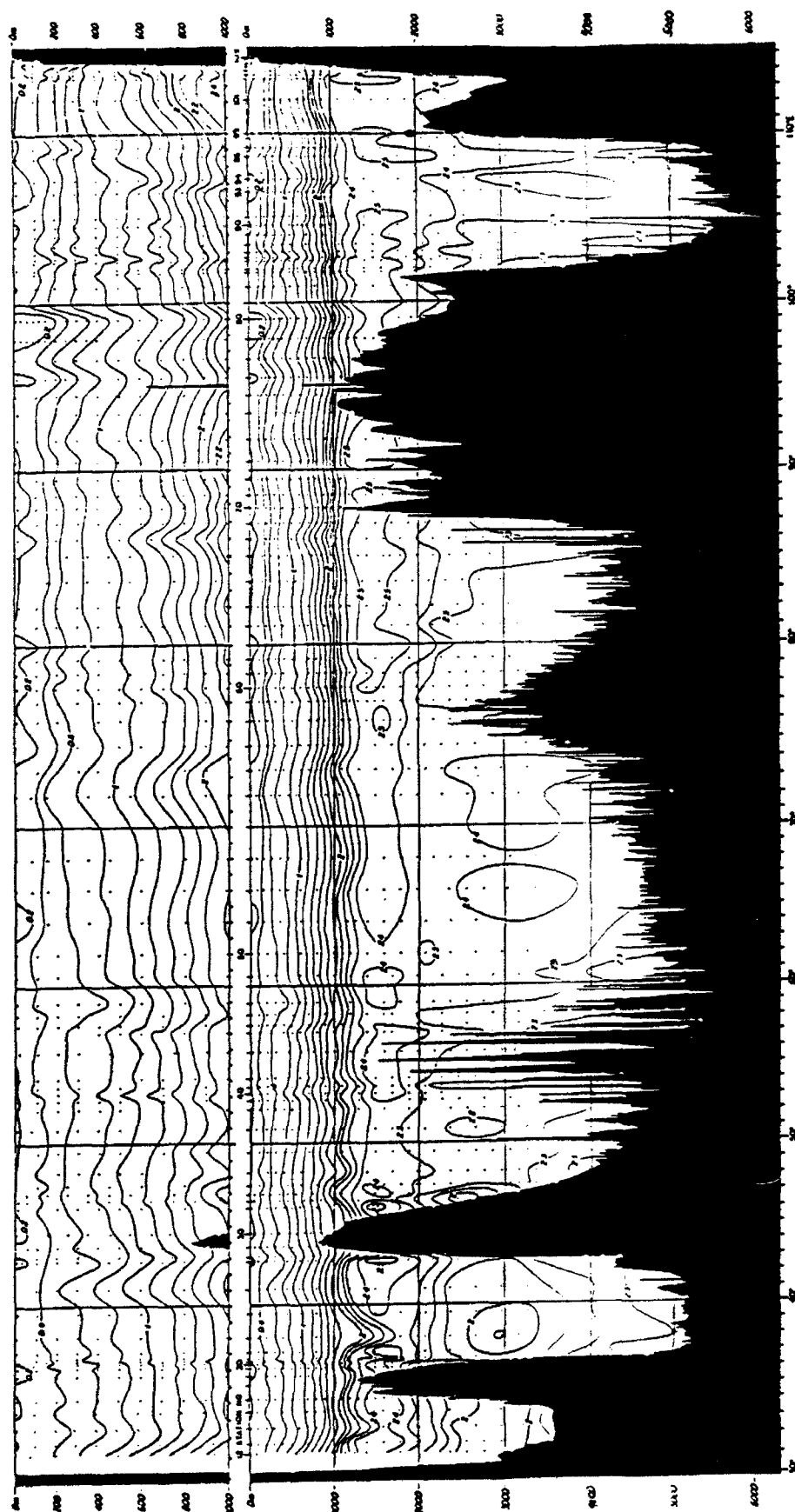


Figure 26: Phosphate *vs.* depth section of trans-Indian Ocean section. Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

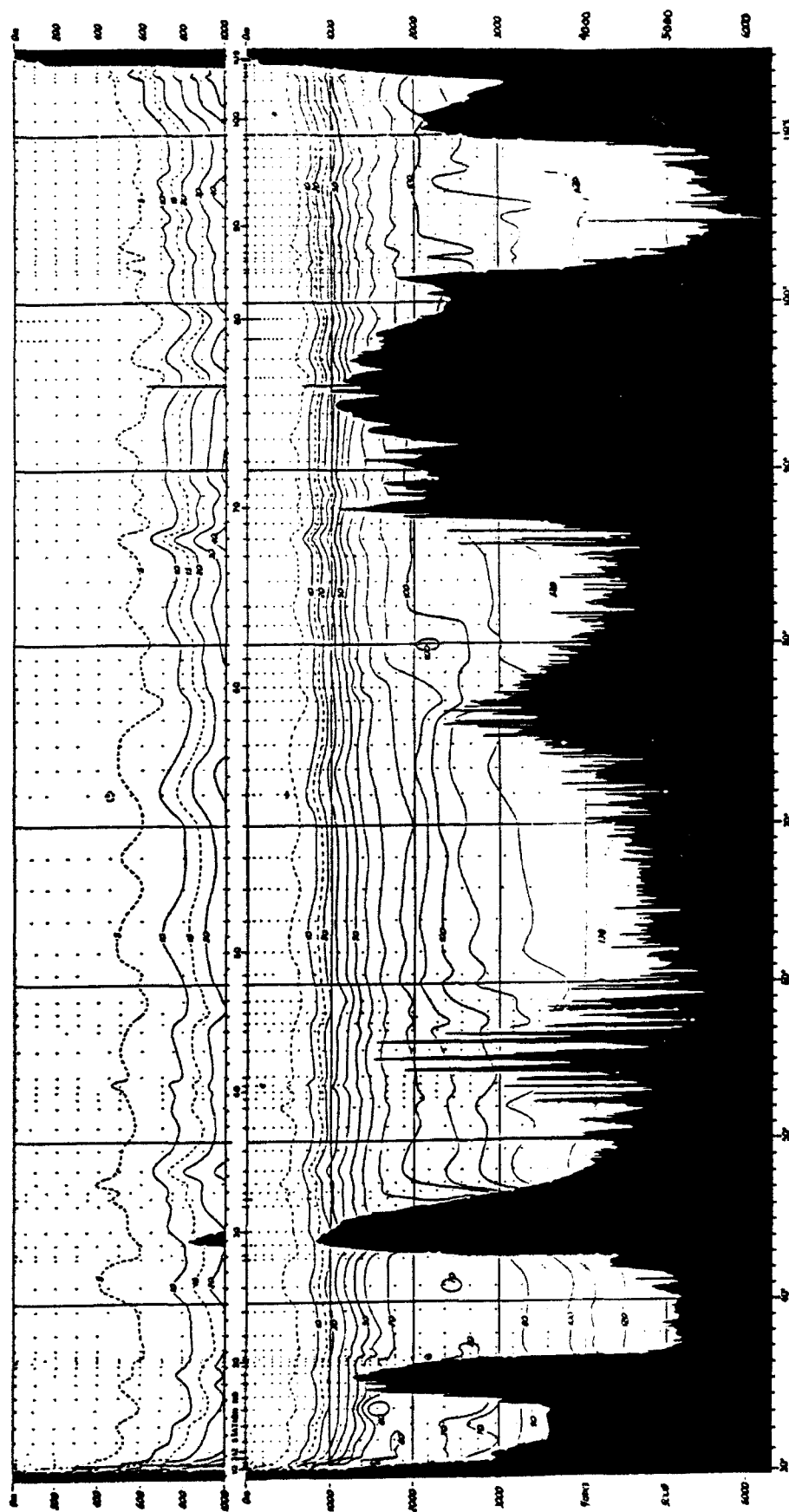


Figure 27: Silicate vs. depth section of the trans-Indian Ocean section. Vertical distortion of the full depth profiles is 500 : 1, while for the expanded shallow sections it is 1250 : 1.

Appendix A: Description of CTD #9 Data Adjustment

Careful examination of deep ($T < 4^{\circ}\text{C}$) potential temperature/salinity data obtained with WHOI CTD #9 on the 32°S trans-Indian Ocean section revealed a small discrepancy with the water sample measurements. As depicted in Figure A1, standard CTD data calibration techniques yielded CTD profiles which diverged from the water sample data below 0.8°C potential temperature by upwards of 0.002 psu. Salinity, computed from CTD data, is dependent on temperature, conductivity and pressure observations: each of which is subject to error. The relative sensitivity of calculated salinity to these variables is approximately 0.001°C , 0.001 mmho and 2.5 db per 0.001 psu change (based on EOS 80 and nominal values of 1.5°C , 34.7 psu and 4500 db.)

Review of the temperature calibration data for CTD #9 from the pre- and post-cruise laboratory measurements indicated that the salinity discrepancy probably was not the product of error in the temperature calibration. The two laboratory calibrations were internally consistent over the full range of calibration temperatures to better than 0.002°C , and we believe the laboratory measurements have an absolute accuracy of 0.002°C . More importantly, because the salinity error occurred over a rather small temperature interval, the required adjustment of the temperature calibration curve to remove the salinity discrepancy would have induced strong change of curvature to the calibration curve below 1°C . Such structure in a calibration curve is outside our experience with CTD instruments. We therefore concluded that the temperature channel was not the source of the observed salinity problem.

A change in the deep-water conductivity calibration algorithm was also ruled out. In order to match the water sample salinity data, a nonlinear conductivity correction would have been required. The NBIS CTD conductivity sensor, however, is inherently a linear device (N. Brown, personal communication, 1988). Some improvement between CTD and water sample data was obtained by setting to zero the coefficient of conductivity cell deformation with pressure. While full agreement might have been achieved by allowing this coefficient to be negative, we did not pursue this course as it implied non-physical behavior of the CTD sensor (cell expanding with increasing pressure).

Hence by default, we concluded the salinity error was the product of pressure error. Using the figures above, a salinity error of 0.002 psu would result from a pressure error of 5 db. We suspect that residual temperature sensitivity in the pressure sensor was responsible for the pressure error, but we were unable to confirm this in the laboratory. Reduction of the data to final form utilized a modified cubic pressure calibration algorithm. The algorithm agreed with that derived from the polynomial least-square fit to the laboratory data at pressures less than 3000 db. At higher pressures, the final pressures were greater than those generated by the laboratory-derived calibration formula by the amount needed to force the CTD potential temperature/salinity curve to overlie the water sample data; the algorithm is reported in the main section of the text. For the bulk of the deep trans-Indian Ocean

data, the adjustment caused an increase of bottom pressure by 10 db or less. Checks were made to insure that the resulting bottom pressure data were consistent with the acoustic depth recorded at each station. The pressure adjustments that were made were within the uncertainty of the acoustic depth data. Finally it should be noted that because this adjustment was made uniformly to all stations occupied with CTD #9, no spurious signal was introduced into the thermal wind shear field of the ocean interior. Potential does exist for shear error at the transitions between stations which used instruments #9 and #8 (station pairs 3-12 and 15-16). However, bottom pressures at these sites were 3000 db or less, levels where the pressure adjustment of CTD #9 was negligible.

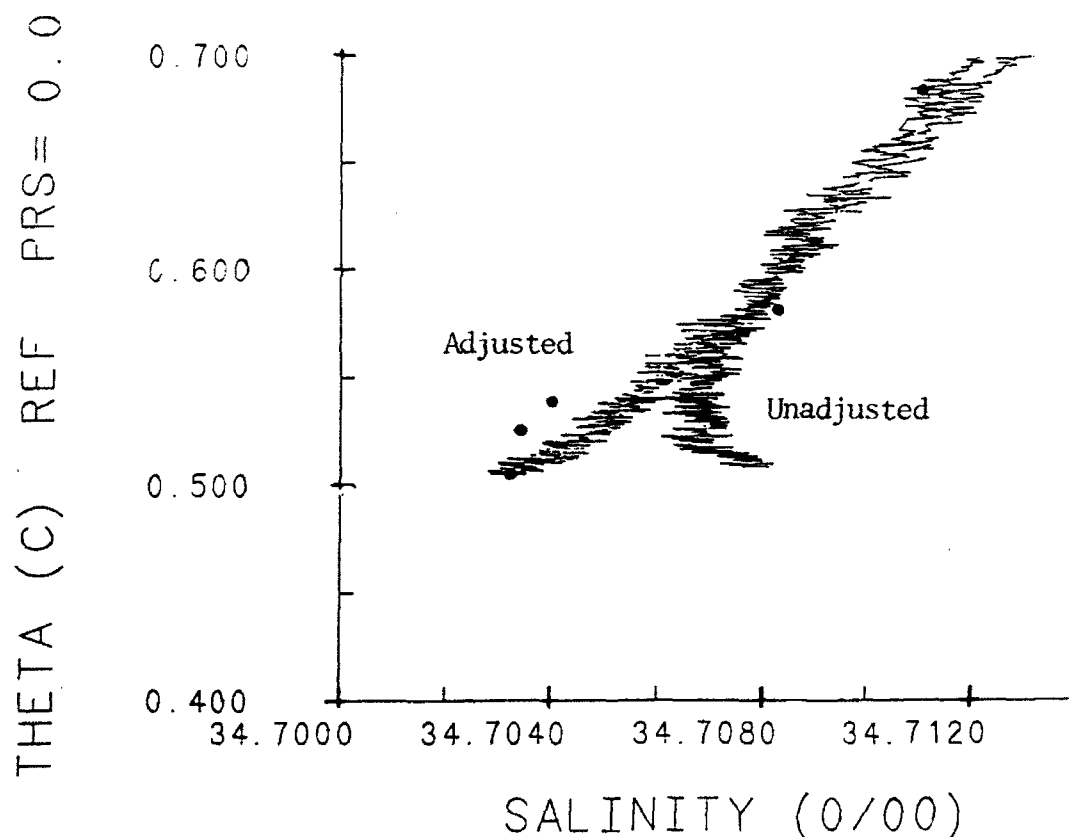


Figure A1: Potential temperature *vs.* CTD salinity plot showing the discrepancy between CTD#9 data and corresponding rosette data in the very deep water. All CTD #9 data was subsequently adjusted as described in Appendix A.

Appendix B: Station Listing Description

Individual station listings have been created with the following information for the trans-Indian cruise. A description of the Fortran algorithms for computing all parameters except those involving integrals and gradients are documented in Unesco TR 44 "Algorithms for computation of fundamental properties of seawater" by N. P. Fofonoff and R. C. Millard. Starting at the left, the station variables are categorized in four groups as follows. The observed variables: temperature, salinity, and oxygen are vertically filtered values at the pressure level indicated. The standard Woods Hole Oceanographic Institution 2 db pressure-averaged CTD data are centered on odd pressure intervals (1,3,5,7,...) while the adopted pressure listing levels are at even pressure values with the exception of 75 and 125 db. The 2 db temperature, salinity, and oxygen data were smoothed with a binomial filter (Unesco TR 54) and then linearly interpolated as required to the standard levels. The potential temperature, potential density anomaly, and potential density anomaly referenced to 2000 and 4000 db that follow in the listings were computed using the Fortran algorithms of Unesco TR 44. The dynamic height and potential energy are integral quantities from the surface to the pressure interval indicated. These assume that the value of the specific volume anomaly of the first level of the 2 db CTD data profile can be extrapolated to the sea surface. A trapezoidal integration method was employed. The next quantities: potential temperature and salinity gradients, potential vorticity, and Brunt-Väisälä frequency, involve the calculation of vertical gradients. Gradient quantities were estimated from a centered linear least squares fit calculated over half of the neighboring listing intervals. The calculated depth involves a dynamic height correction and a latitude dependent gravity correction.

The header of each station listing contains the beginning time and position for the station. Positions are determined from a transit satellite navigator or by dead reckoning from last fix. The speed of sound is an average value computed from averaged travel time of the profile (Wilson, 1960). The water depth is from an echo sounder, corrected using the Carter tables.

The columns of the station listing are:

PRES DBAR Pressure (P) level in decibars.

TEMP °C Temperature (T) in degrees Celsius calibrated on the 1968 International Practical Temperature Scale (IPTS 1968).

SALT	PSU	Salinity (S) computed from conductivity (C), temperature, and pressure according to the 1978 practical salinity scale. (Unesco TR 44, pp. 6-12). $C(35,15,0) = 42.914$ mmho/cm.
OXYG	ML/L	Oxygen in units of milliliters per liter. The partial pressure of oxygen is computed from the polarographic electrode measurements using an algorithm described by Owens and Millard (1985).
PTEMP	°C	Potential temperature θ in degrees Celsius computed by integrating the adiabatic lapse rate after Bryden (1973) (see Unesco TR 44, pp. 42-45). The reference level, P_r , for the calculation is 0.0 db. $\theta = \theta(S,T,P,P_r)$.
SIGTH	kg/m ³	Potential density anomaly in kilograms/m ³ . Obtained by computing the density anomaly $\gamma(S,T,P)$ (density - 1000 kg/m ³) at 0 pressure replacing the <i>in situ</i> temperature with potential temperature $\theta = \theta(S,T,P,0.0)$ referenced to 0 db. $\gamma_\theta = \gamma(S,\theta,0.0)$.
SIGM2	kg/m ³	Potential density anomaly referenced to 2000 db in kilograms/m ³ . Obtained by computing the density anomaly γ (density - 1000 kg/m ³) at 2000 db using potential temperature referenced to 2000 db $\theta = \theta(S,T,P,2000)$, $\gamma_\theta = \gamma(S,\theta,2000)$.
SIGM4	kg/m ³	Potential density anomaly referenced to 4000 db in kilograms/m ³ . Obtained by computing the density anomaly γ (density - 1000 kg/m ³) at 4000 db with potential temperature referenced to 4000 db $\theta = \theta(S,T,P,4000)$. $\gamma_\theta = \gamma(S,\theta,4000)$.
DYN-HT	$10\left(\frac{J}{kg}\right)$	Dynamic height in units of dynamic meters (10 Joules/kg) is the integral with pressure of specific volume anomaly (see <i>The Sea</i> , Volume I, p. 336 by Fonoff, 1962).

POT. E	$10^{-5} \left(\frac{J}{m^2} \right)$	Potential energy anomaly in 10^{-5} Joules/ m^2 is the integral with pressure of the specific volume anomaly multiplied by pressure (see <i>The Sea</i> , Volume I, p. 338 by Fofonoff, 1962).
GRD-PT	$10^3 \left(\frac{^{\circ}C}{db} \right)$	Potential temperature gradient in units of millidegrees Celsius per decibar. Estimated from the least squares temperature gradient over half the surrounding pressure intervals minus the center pressure adiabatic lapse rate.
GRD-S	$10^3 \left(\frac{psu}{db} \right)$	Salinity gradient in psu per decibar. Estimated from the least squares salinity gradient over half the surrounding pressure intervals.
POT-V	$10^{-12} m s^{-1}$	Planetary potential vorticity in $m^{-1} \cdot s^{-1}$. This is defined as fE , where f is the Coriolis frequency and E is the stability parameter (Millard <i>et al.</i> , 1990) estimated over half the surrounding pressure intervals.
B-V	(1/hr)	Brunt-Väisälä frequency in cycles per hour. This is the natural frequency of oscillation of a water parcel when vertically displaced from a rest position assuming no exchanges of heat or salt with surroundings. This calculation uses the adiabatic leveling of steric anomaly (Fofonoff, 1985; Millard <i>et al.</i> , 1990).
DEPTH	(m)	The depth of the pressure interval including the local gravity and dynamic height (see DYN-HT definition) corrections (see Unesco TR 44, pp. 25-28).

Station Listing Data Sheets

CRUISE: CO 29 STA: 1 DATE (D/M/Y): 13-11-87 TIME: 0625 LAT: 31 35.07 S LONG: 31 10 56 E

GRAVITY= 9.7945 M/S CORIOLIS= -.76386E-04 1/S SOUND SPEED= 1500.2 M/S Depth= 3107 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.685	35.537	5.76	20.685	24.990	33.413	41.473	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.685	35.537	5.76	20.685	24.990	33.413	41.473	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	20.693	35.556	5.67	20.689	25.003	33.425	41.486	0.059	0.1	-0.08	0.003	-1.71	0.268	19.9
30	20.695	35.556	5.67	20.690	25.003	33.425	41.486	0.089	0.1	0.43	-0.030	10.39	-0.661	29.9
40	20.697	35.556	5.67	20.689	25.003	33.426	41.486	0.118	0.2	-0.69	0.079	-18.47	0.882	39.8
50	20.420	35.576	5.69	20.411	25.093	33.524	41.592	0.148	0.4	-123.29	7.263	-2874.04	10.999	49.8
100	18.153	35.643	5.40	18.136	25.732	34.233	42.366	0.271	1.3	-19.09	-0.361	-337.61	3.770	99.5
125	17.794	35.623	5.30	17.773	25.806	34.319	42.464	0.328	2.0	-11.64	-0.340	-197.16	2.881	124.3
150	17.510	35.616	5.30	17.484	25.872	34.394	42.548	0.383	2.7	-10.61	-0.311	-179.91	2.752	149.2
200	16.924	35.580	5.19	16.891	25.987	34.529	42.702	0.489	4.6	-16.19	-1.061	-229.85	3.111	198.9
250	16.169	35.538	5.09	16.129	26.133	34.702	42.899	0.590	6.9	-13.77	-1.192	-172.86	2.697	248.5
300	15.358	35.444	5.04	15.311	26.246	34.845	43.071	0.685	9.6	-15.56	-1.390	-186.11	2.799	298.2
350	14.718	35.387	5.01	14.665	26.345	34.967	43.215	0.777	12.6	-14.32	-1.563	-149.70	2.510	347.8
400	14.150	35.335	5.09	14.091	26.428	35.072	43.340	0.864	16.0	-11.66	-0.875	-140.60	2.433	397.4
450	13.479	35.246	5.21	13.415	26.500	35.171	43.464	0.948	19.6	-14.93	-2.328	-103.68	2.089	447.0
500	12.906	35.180	5.14	12.836	26.566	35.260	43.574	1.030	23.6	-13.44	-1.822	-104.66	2.099	496.6
600	11.721	35.015	5.05	11.642	26.669	35.412	43.772	1.186	32.3	-14.03	-1.818	-104.06	2.093	595.0
700	10.424	34.859	4.99	10.338	26.784	35.582	43.995	1.333	42.1	-14.03	-1.609	-104.16	2.094	694.8
800	9.183	34.737	4.81	9.092	26.898	35.751	44.215	1.469	52.5	-12.92	-1.033	-110.97	2.161	793.8
900	7.740	34.605	4.72	7.647	27.016	35.936	44.462	1.595	63.4	-15.52	-1.275	-117.39	2.223	892.0
1000	6.427	34.517	4.57	6.333	27.128	36.111	44.696	1.708	74.3	-11.22	-0.630	-91.55	1.963	991.7
1200	4.510	34.458	4.44	4.413	27.311	36.389	45.064	1.902	96.1	-6.60	0.138	-77.42	1.805	1189.3
1400	3.903	34.572	4.04	3.793	27.467	36.575	45.278	2.063	117.4	-3.12	0.426	-56.94	1.548	1386.7
1600	3.365	34.652	4.00	3.244	27.584	36.720	45.449	2.200	138.2	-2.33	0.394	-46.92	1.405	1583.9
1800	2.930	34.701	4.21	2.798	27.665	36.823	45.574	2.316	158.4	-1.79	0.245	-32.71	1.173	1780.9
2000	2.749	34.736	4.38	2.601	27.710	36.879	45.639	2.421	178.7	-0.55	0.100	-11.60	0.699	1977.7
2200	2.617	34.762	4.58	2.453	27.744	36.920	45.686	2.521	200.1	-0.70	0.135	-15.43	0.806	2174.3
2400	2.519	34.786	4.76	2.338	27.773	36.955	45.727	2.617	222.5	-0.54	0.091	-11.26	0.688	2370.7
2600	2.442	34.801	4.94	2.243	27.793	36.980	45.756	2.709	246.1	-0.50	0.093	-11.01	0.681	2567.0
2800	2.334	34.814	5.08	2.118	27.813	37.007	45.790	2.799	270.8	-0.70	0.028	-9.70	0.639	2763.0
3000	2.192	34.814	5.16	1.959	27.826	37.028	45.820	2.886	296.5	-1.17	-0.035	-11.74	0.703	2958.9
3127	2.073	34.809	5.22	1.830	27.832	37.042	45.840	2.939	313.3	-0.77	-0.037	-11.74	0.000	3083.2

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
0	1010.1	6.376	6.281	27.141	36.126	44.713	34.528	34.540	4.51							999	222555555
0	1010.1	6.374	6.280	27.141	36.126	44.713	34.528	34.541	4.50							999	222555555
0	1012.4	6.360	6.266	27.144	36.130	44.718	34.530	34.539	4.50							1002	222555555
0	1012.9	6.360	6.265	27.144	36.130	44.718	34.530	34.538	4.37							1002	222555555
0	1012.9	6.359	6.265	27.144	36.130	44.718	34.530	34.537	4.44							1002	222555555
0	1004.1	6.422	6.327	27.131	36.114	44.699	34.524	34.525	4.60							994	222555555
0	1000.6	6.430	6.336	27.126	36.108	44.693	34.518	34.525								990	222555555
0	1999.6	2.749	2.601	27.708	36.876	45.636	34.737	34.741	4.58							1974	222555555
0	1999.6	2.749	2.601	27.708	36.876	45.636	34.737	34.741	4.38							1974	222555555
0	2002.6	2.747	2.599	27.708	36.877	45.636	34.737	34.741	4.37							1977	222555555
0	2004.0	2.746	2.598	27.708	36.877	45.637	34.737	34.740	4.39							1979	222555555
0	2002.6	2.747	2.598	27.708	36.877	45.637	34.737	34.738	4.39							1977	222555555
0	2003.6	2.747	2.599	27.708	36.877	45.636	34.737	34.738	4.37							1978	222555555
0	2003.4	2.747	2.599	27.708	36.877	45.636	34.737	34.738	4.37							1978	222555555
0	2003.0	2.747	2.598	27.708	36.877	45.637	34.737	34.937	4.41							1978	222555555
0	3125.1	2.073	1.831	27.830	37.039	45.837	34.810	34.813	5.22							3078	222555555
0	3124.2	2.074	1.831	27.830	37.039	45.837	34.810	34.813	5.30							3077	222555555
0	3125.4	2.073	1.830	27.830	37.039	45.837	34.810	34.813	5.20							3078	222555555
0	3127.4	2.074	1.831	27.830	37.039	45.837	34.810	34.815	5.18							3080	222555555
0	3129.5	2.073	1.830	27.830	37.039	45.837	34.810	34.814	5.21							3082	222555555
0	3125.6	2.073	1.831	27.830	37.039	45.837	34.810	34.813	5.22							3078	222555555
0	3125.7	2.073	1.831	27.830	37.039	45.837	34.810	34.814	5.20							3078	222555555
0	3124.5	2.073	1.831	27.830	37.039	45.837	34.810	34.811	5.21							3077	222555555

CRUISE: CD 29 STA: 3 DATE (D/M/Y): 13-11-87 TIME: 2035 LAT: 31 22.54 S LONG: 30 50 10 E

GRAVITY= 9.7943 M/S CORIOLIS= -.75932E-04 1/S SOUND SPEED= 1498.6 M/S Depth= 2931 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-v (m s)-1 10-12	B-v CPH	DEPTH METERS
0	23.083	35.393	5.51	23.083	24.210	32.565	40.564	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	23.083	35.393	5.51	23.083	24.210	32.566	40.564	0.004	0.0	-0.41	0.000	0.00	0.000	1.0
20	23.095	35.391	5.20	23.091	24.206	32.561	40.559	0.074	0.1	-1.01	0.057	-25.03	1.030	19.9
30	23.008	35.397	5.33	23.002	24.236	32.594	40.594	0.111	0.2	-110.87	7.701	-2793.52	10.876	29.9
40	21.000	35.539	5.36	21.072	24.886	33.298	41.348	0.145	0.3	-37.95	3.498	-973.76	6.421	39.8
50	20.970	35.549	5.20	20.961	24.924	33.339	41.392	0.176	0.4	-13.50	0.901	-325.16	3.711	49.8
100	18.659	35.626	4.80	18.641	25.592	34.077	42.195	0.310	1.4	-29.38	0.523	-584.06	4.976	99.5
125	17.978	35.643	5.08	17.957	25.777	34.283	42.422	0.368	2.1	-14.65	0.792	-330.69	3.742	124.4
150	17.609	35.637	5.06	17.584	25.863	34.382	42.533	0.423	2.9	-16.70	-0.387	-287.75	3.491	149.2
200	16.675	35.572	4.86	16.643	26.039	34.590	42.771	0.529	4.8	-19.91	-1.297	-279.30	3.439	198.9
250	15.682	35.501	4.92	15.643	26.216	34.802	43.016	0.626	7.0	-17.13	-1.359	-216.19	3.026	248.6
300	14.904	35.431	4.91	14.858	26.337	34.952	43.193	0.718	9.6	-14.00	-1.298	-159.45	2.598	298.2
350	14.300	35.367	4.99	14.248	26.419	35.057	43.320	0.805	12.4	-12.91	-1.484	-125.62	2.306	347.8
400	13.602	35.282	4.96	13.545	26.501	35.166	43.454	0.888	15.6	-14.73	-1.936	-123.10	2.283	397.5
450	13.000	35.200	4.96	12.937	26.561	35.251	43.561	0.969	19.1	-12.92	-1.718	-101.79	2.076	447.1
500	12.361	35.110	5.03	12.294	26.618	35.334	43.669	1.048	22.9	-12.34	-1.843	-80.76	1.849	496.6
600	11.066	34.938	4.94	10.991	26.730	35.500	43.886	1.198	31.4	-12.96	-1.628	-92.10	1.975	595.8
700	9.726	34.784	4.80	9.644	26.844	35.673	44.114	1.339	40.7	-13.29	-1.306	-104.18	2.100	694.8
800	8.415	34.677	4.51	8.329	26.971	35.859	44.355	1.468	50.6	-13.24	-0.806	-120.83	2.262	793.8
900	6.830	34.554	4.33	6.743	27.103	36.065	44.632	1.585	60.7	-16.17	-1.366	-110.76	2.166	892.8
1000	5.499	34.460	4.44	5.412	27.199	36.227	44.854	1.689	70.8	-10.34	-0.240	-98.30	2.040	991.7
1200	4.203	34.491	4.12	4.109	27.370	36.463	45.152	1.869	90.9	-5.21	0.344	-71.94	1.745	1189.3
1400	3.536	34.595	3.85	3.431	27.522	36.648	45.368	2.017	110.4	-3.02	0.398	-52.90	1.497	1386.7
1600	3.114	34.672	3.90	2.996	27.624	36.772	45.513	2.141	129.4	-1.18	0.328	-30.92	1.144	1583.9
1800	2.818	34.721	4.08	2.686	27.691	36.855	45.611	2.251	148.5	-1.56	0.216	-20.34	1.095	1780.8
2000	2.631	34.756	4.40	2.484	27.737	36.911	45.676	2.351	167.8	-0.78	0.144	-16.49	0.836	1977.6
2200	2.517	34.776	4.57	2.354	27.763	36.944	45.716	2.445	188.0	-0.53	0.098	-11.23	0.690	2174.2
2400	2.460	34.797	4.82	2.280	27.786	36.971	45.746	2.537	209.5	-0.51	0.057	-8.83	0.612	2370.7
2600	2.380	34.806	4.94	2.182	27.832	36.992	45.772	2.626	232.3	-0.66	0.067	-11.22	0.689	2566.9
2800	2.236	34.815	5.10	2.022	27.822	37.021	45.809	2.713	256.2	-1.07	-0.006	-11.83	0.708	2762.9
2951	2.042	34.808	5.12	1.817	27.832	37.042	45.841	2.776	274.8	-1.79	-0.078	-11.83	0.000	2910.0

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
13	14.3	23.088	23.096	24.202	32.557	40.555	35.392	35.392	5.25	2.19			0.20	0.00			14	222252255
12	201.5	16.447	16.415	26.090	34.648	42.836	35.572	35.558	4.82	4.12			5.30	0.01			199	222252255
11	402.4	13.567	13.510	26.500	35.166	43.456	35.275	35.274	5.01	4.64			9.40	0.01			398	222252255
10	597.0	11.181	11.105	26.710	35.476	43.858	34.944	34.951	4.94	7.09			15.00	0.01			592	222252255
9	803.8	8.328	8.242	26.980	35.072	44.372	34.676	34.673	4.50	18.12			23.40	0.01			796	222252255
7	1402.5	3.332	3.229	27.537	36.674	45.404	34.594	34.580	3.91	69.38			34.20	0.00			1387	222252255
6	1800.6	2.806	2.675	27.689	36.854	45.610	34.722	34.723	4.05	80.76			32.50	0.00			1779	222252255
5	2199.9	2.527	2.364	27.759	36.940	45.711	34.776	34.778	4.63	73.96			30.00	0.00			2171	222252255
4	2603.4	2.372	2.174	27.801	36.991	45.772	34.808	34.808	4.95	67.85			28.20	0.00			2567	222252255
3	2949.7	2.042	1.817	27.829	37.039	45.838	34.808	34.807	5.10	74.17			28.10	0.00			2906	222252255
2	2949.1	2.041	1.817	27.829	37.039	45.838	34.808	34.810	5.14	74.01			28.10	0.00			2906	222252255

CRUISE: CD 29 STA: 4 DATE (D/M/Y): 14-11-87 TIME: 0125 LAT: 31 15.59 S LONG 30 39 38 E

GRAVITY= 9.7942 M/S CORIOLIS= -.75680E-04 1/S SOUND SPEED= 1497.9 M/S Depth= 2926 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEP'TH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	23.388	35.368	5.22	23.388	24.101	32.449	40.440	0.000	0.0	-0.21	0.000	0.00	0.000	0.0
3	23.388	35.368	5.22	23.388	24.102	32.449	40.440	0.011	0.0	-0.41	0.000	0.00	0.000	3.0
20	23.394	35.368	5.24	23.390	24.101	32.449	40.439	0.076	0.1	-0.46	0.052	-12.90	0.740	19.9
30	23.399	35.367	5.32	23.393	24.100	32.448	40.438	0.114	0.2	0.88	-0.097	24.49	-1.020	29.9
40	23.343	35.370	5.22	23.334	24.119	32.468	40.460	0.152	0.3	-30.84	1.264	-736.78	5.595	39.8
50	21.831	35.450	5.08	21.821	24.611	33.002	41.033	0.189	0.5	-220.13	16.232	-5489.06	15.271	49.8
100	18.240	35.636	5.10	18.222	25.705	34.203	42.334	0.323	1.5	-32.60	0.460	-635.82	5.197	99.5
125	17.722	35.627	4.98	17.701	25.827	34.342	42.489	0.380	2.1	-19.24	0.149	-351.26	3.863	124.4
150	17.341	35.637	5.23	17.315	25.928	34.456	42.615	0.434	2.9	-6.18	0.603	-146.13	2.492	149.2
200	16.433	35.561	4.94	16.400	26.087	34.646	42.835	0.537	4.7	-21.47	-1.930	-267.51	3.371	198.9
250	15.540	35.491	4.90	15.501	26.240	34.831	43.050	0.633	6.9	-20.33	-1.637	-251.63	3.270	248.6
300	14.636	35.406	4.90	14.591	26.375	35.000	43.251	0.722	9.4	-13.49	-1.303	-147.49	2.503	298.2
350	13.880	35.317	4.94	13.829	26.468	35.123	43.400	0.807	12.2	-13.55	-1.575	-126.85	2.321	347.8
400	13.216	35.229	5.00	13.160	26.539	35.220	43.522	0.889	15.4	-16.51	-2.298	-125.34	2.308	397.5
450	12.521	35.134	5.04	12.460	26.605	35.314	43.642	0.967	18.8	-11.11	-1.353	-90.70	1.963	447.1
500	11.837	35.046	4.98	11.772	26.669	35.406	43.761	1.043	22.5	-15.57	-1.991	-115.01	2.211	496.6
600	10.374	34.880	4.39	10.302	26.807	35.606	44.020	1.187	30.5	-10.61	-1.003	-90.00	1.955	595.8
700	9.456	34.800	4.08	9.376	26.901	35.741	44.193	1.321	39.4	-12.45	-1.205	-94.00	1.999	694.8
800	8.134	34.678	4.20	8.049	27.014	35.915	44.423	1.445	48.9	-18.89	-1.732	-130.39	2.354	793.8
900	6.447	34.546	4.20	6.362	27.147	36.128	44.711	1.556	58.4	-9.75	-0.123	-102.56	2.087	892.8
1000	5.468	34.528	4.02	5.381	27.256	36.285	44.913	1.655	68.0	-6.63	0.399	-93.99	1.998	991.6
1200	4.095	34.583	3.68	4.002	27.455	36.552	45.244	1.820	86.5	-4.78	0.538	-78.89	1.831	1189.2
1400	3.240	34.672	3.78	3.146	27.610	36.750	45.483	1.950	103.7	-3.55	0.170	-44.39	1.373	1386.6
1600	2.854	34.714	4.04	2.739	27.680	36.842	45.595	2.059	120.3	-1.39	0.201	-25.24	1.036	1583.8
1800	2.658	34.748	4.30	2.529	27.726	36.899	45.661	2.158	137.5	-0.76	0.155	-16.57	0.839	1780.7
2000	2.545	34.771	4.54	2.400	27.756	36.935	45.704	2.252	155.7	-0.57	0.109	-12.10	0.717	1977.5
2200	2.462	34.793	4.74	2.300	27.781	36.965	45.739	2.342	175.0	-0.38	0.082	-8.73	0.609	2174.1
2400	2.408	34.805	4.87	2.229	27.797	36.985	45.762	2.430	195.6	-0.44	0.048	-7.45	0.563	2370.5
2600	2.321	34.813	5.00	2.125	27.812	37.005	45.787	2.517	217.8	-0.43	0.033	-6.66	0.532	2566.8
2800	2.178	34.814	5.01	1.965	27.826	37.028	45.819	2.602	241.3	-1.44	-0.040	-13.92	0.769	2762.8
2935	2.014	34.807	5.13	1.792	27.833	37.045	45.845	2.658	257.5	-1.25	-0.061	-13.92	0.000	2895.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
14	11.9	23.354	23.351	24.109	32.458	40.450	35.368	35.367	5.15	2.30		0.30	0.01		0.000	11	222252255
13	79.3	19.863	18.849	25.523	34.002	42.114	35.609	35.599	4.93	3.88		2.70	0.25			78	222252255
12	200.4	16.446	16.414	26.080	34.639	42.828	35.560	35.556	4.92	4.23		5.40	0.01			198	222252255
11	500.4	11.769	11.704	26.675	35.416	43.773	35.042	35.034	5.08	5.00		13.10	0.01			495	222252255
10	698.9	9.470	9.389	26.896	35.736	44.187	34.801	34.798	4.17	18.71		22.40	0.01			692	222252255
9	800.3	7.951	7.868	27.037	35.946	44.462	34.677	34.669	4.20	24.12		25.60	0.01			792	222252255
8	1001.9	5.500	5.413	27.252	36.279	44.905	34.531	34.554	3.89	46.98		31.90	0.00			991	222252255
7	1199.6	4.094	4.000	27.452	36.550	45.242	34.584	34.581	3.70	65.66		34.40	0.00			1186	222252255
6	1399.6	3.238	3.136	27.608	36.749	45.482	34.672	34.676	3.76	80.33		34.10	0.01			1384	222252255
5	1600.4	2.848	2.733	27.678	36.840	45.593	34.714	34.715	4.03	80.18		32.70	0.00			1582	222252255
4	1898.2	2.601	2.464	27.740	36.916	45.682	34.763	34.764	4.43	75.49		30.30	0.00			1875	222252255
3	2200.6	2.461	2.299	27.778	36.962	45.737	34.793	34.793	4.79							2172	222555555
2	2502.9	2.351	2.163	27.802	36.993	45.774	34.800	34.800	4.89	68.70		28.30	0.00			2469	222252255

CRUISE: CD 29 STA: 5 DATE (D/M/Y): 14-11-87 TIME: 0546 LAT: 31 12.09 S LONG: 30 35.84 E

GRAVITY= 9.7942 M/S CORIOLIS= -.7553E-04 1/S SOUND SPEED= 1496.9 M/S Depth= 2675 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
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0	23.431	35.351	5.17	23.431	24.076	32.423	40.413	0.000	0.0	-0.21	0.000	0.00	0.000	0.0
1	23.431	35.351	5.17	23.431	24.077	32.423	40.413	0.004	0.0	-0.41	0.000	0.00	0.000	1.0
20	23.429	35.351	5.16	23.425	24.078	32.425	40.415	0.077	0.1	-0.93	0.069	-23.92	1.009	19.9
30	23.424	35.352	5.20	23.418	24.081	32.428	40.418	0.115	0.2	-0.86	0.119	-25.23	1.036	29.9
40	23.377	35.357	5.21	23.369	24.099	32.448	40.439	0.153	0.3	-18.33	1.883	-501.34	4.619	39.8
50	22.842	35.402	5.06	22.832	24.288	32.651	40.656	0.191	0.5	-240.35	14.160	-5847.18	15.774	49.8
100	18.278	35.651	5.30	18.260	25.707	34.204	42.334	0.328	1.5	-37.54	1.331	-776.66	5.749	99.5
125	17.549	35.634	5.08	17.528	25.875	34.395	42.548	0.384	2.2	-22.30	-0.917	-357.42	3.900	124.4
150	17.142	35.608	4.91	17.117	25.954	34.489	42.654	0.437	2.9	-10.38	-0.840	-140.35	2.444	149.2
200	16.447	35.561	4.79	16.415	26.084	34.643	42.831	0.540	4.7	-17.69	-1.601	-219.32	3.055	198.9
250	15.577	35.495	4.79	15.537	26.234	34.825	43.042	0.636	6.9	-16.46	-1.279	-207.58	2.972	248.6
300	14.755	35.416	4.85	14.710	26.357	34.978	43.224	0.727	9.5	-20.49	-2.116	-217.32	3.041	298.2
350	13.912	35.325	4.95	13.861	26.468	35.121	43.398	0.812	12.3	-16.82	-2.209	-142.63	2.464	347.9
400	13.130	35.224	5.02	13.074	26.552	35.236	43.542	0.893	15.4	-16.66	-2.196	-132.51	2.375	397.5
450	12.361	35.115	4.75	12.301	26.621	35.337	43.672	0.971	18.8	-13.50	-1.936	-92.23	1.981	447.1
500	11.687	35.027	4.67	11.622	26.682	35.426	43.787	1.046	22.4	-15.16	-1.789	-118.32	2.244	496.6
600	10.302	34.868	4.52	10.230	26.810	35.613	44.029	1.189	30.4	-11.65	-1.149	-95.34	2.014	595.8
700	9.334	34.785	4.15	9.254	26.909	35.754	44.211	1.322	39.2	-11.48	-0.961	-94.62	2.007	694.8
800	8.021	34.670	4.17	7.938	27.024	35.930	44.443	1.445	48.6	-7.74	-0.258	-80.97	1.856	793.8
900	7.233	34.641	3.92	7.143	27.116	36.059	44.607	1.559	53.5	-16.36	-1.136	-124.12	2.298	892.8
1000	5.574	34.576	3.80	5.486	27.282	36.305	44.927	1.658	68.1	-10.90	0.369	-137.22	2.417	991.6
1200	3.673	34.664	3.58	3.583	27.562	36.679	45.391	1.809	85.0	-6.54	0.215	-76.72	1.807	1189.2
1400	3.028	34.689	3.90	2.928	27.644	36.795	45.539	1.925	109.3	-1.86	0.157	-26.80	1.068	1386.6
1600	2.769	34.727	4.10	2.655	27.698	36.864	45.621	2.029	116.2	-1.26	0.192	-23.30	0.996	1583.7
1800	2.594	34.759	4.35	2.465	27.741	36.916	45.682	2.125	132.8	-0.65	0.113	-13.00	0.744	1780.7
2000	2.522	34.780	4.56	2.377	27.764	36.944	45.714	2.216	150.5	-0.49	0.099	-10.65	0.673	1977.5
2200	2.438	34.798	4.80	2.276	27.788	36.973	45.748	2.305	169.5	-0.38	0.063	-7.58	0.568	2174.1
2400	2.337	34.811	4.95	2.159	27.807	36.999	45.780	2.391	189.8	-0.86	0.060	-12.67	0.734	2370.5
2600	2.184	34.815	5.08	1.990	27.824	37.025	45.814	2.475	211.1	-0.96	0.000	-12.67	0.000	2566.7
2655	2.162	34.814	5.07	1.963	27.826	37.028	45.819	2.497	217.1	-0.83	-0.004	-12.67	0.000	2620.7

BOTL NO.	PRES DBAR	CTD IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
15	9.2	23.419	23.417	24.077	32.425	40.415	35.351	35.353	5.10	2.66		0.20	0.03			9	222252255
14	56.2	20.230	20.220	25.079	33.517	41.591	35.495	35.548	4.96	2.85		1.30	0.07			55	222252255
13	201.6	16.177	16.145	26.143	34.711	42.908	35.560	35.535	4.82	4.46		5.80	0.02			199	222252255
12	402.1	12.886	12.854	26.592	35.285	43.600	35.216		5.01	5.55		10.90	0.00			398	222252255
11	600.2	10.175	10.103	26.828	35.636	44.058	34.867	34.856	4.41	13.57		0.00	0.00			594	222252255
10	800.7	8.081	7.997	27.014	35.917	44.427	34.672	34.668	4.20	24.11		25.50	0.00			793	222252255
9	999.7	5.513	5.425	27.286	36.312	44.937	34.576	34.581	3.71	50.72		32.20	0.00			989	222252255
7	1399.2	3.016	2.916	27.641	36.794	45.538	34.689	34.685	3.92	80.27		33.50	-0.01			1383	222252255
6	1604.0	2.728	2.614	27.699	36.868	45.627	34.728	34.731	4.19	79.79		32.10	0.00			1585	222252255
5	1902.3	2.566	2.428	27.749	36.926	45.694	34.770	34.770	4.38	75.72		30.50	0.00			1879	222252255
4	2202.1	2.446	2.284	27.784	36.969	45.744	34.799	34.802	4.73	70.22		28.90	0.00			2173	222252255
3	2500.1	2.271	2.085	27.813	37.009	45.794	34.815	34.814	5.03	68.66		27.90	-0.01			2466	222252255
2	2646.6	2.165	1.967	27.823	37.025	45.816	34.815	34.812	5.06	70.68		27.90	-0.01			2609	222252255

CRUISE: CD 29 STA: 6 DATE (D/M/Y): 14-11-87 TIME: 0929 LAT: 31 9.14 S LONG: 30 32.08 E

GRAVITY= 9.7942 M/S CORIOLIS= -0.75446E-04 1/S SOUND SPEED= 1495.4 M/S Depth= 2306 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	F	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m/s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	23.077	35.393	5.17	23.077	24.211	32.567	40.565	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	23.077	35.393	5.17	23.077	24.211	32.567	40.565	0.004	0.0	-0.41	0.000	0.00	0.000	1.0
20	23.075	35.396	5.14	23.071	24.215	32.571	40.570	0.074	0.1	-5.04	0.049	-110.52	2.170	19.9
30	23.030	35.394	5.08	23.024	24.227	32.595	40.584	0.111	0.2	-4.93	-0.116	-98.79	2.052	29.9
40	22.927	35.395	4.94	22.919	24.250	32.618	40.621	0.148	0.3	-149.89	8.931	-3654.62	12.480	39.8
50	21.172	35.533	5.00	21.162	24.857	33.266	41.314	0.182	0.5	-103.81	5.688	-2417.54	10.150	49.8
100	17.975	35.624	4.70	17.958	25.762	34.268	42.408	0.312	1.4	-38.73	0.575	-751.24	5.658	99.5
125	17.429	35.631	4.92	17.408	25.901	34.426	42.582	0.367	2.1	-19.04	-0.812	-308.32	3.625	124.4
150	17.118	35.632	5.05	17.093	25.978	34.513	42.679	0.419	2.8	-13.60	-0.449	-223.30	3.085	149.2
200	15.947	35.522	4.73	15.915	26.170	34.746	42.951	0.519	4.6	-21.97	-1.726	-280.55	3.458	198.9
250	14.910	35.439	4.75	14.872	26.339	34.954	43.194	0.611	6.7	-19.13	-1.796	-214.87	3.026	248.6
300	14.234	35.366	4.89	14.190	26.430	35.071	43.335	0.697	9.1	-13.92	-1.548	-135.96	2.407	298.2
350	13.365	35.248	4.94	13.315	26.522	35.197	43.493	0.779	11.8	-18.11	-2.513	-139.51	2.438	347.8
400	12.739	35.162	4.85	12.684	26.582	35.282	43.602	0.858	14.8	-12.43	-1.752	-88.76	1.945	397.4
450	12.037	35.066	4.93	11.977	26.645	35.374	43.721	0.935	18.2	-17.56	-2.371	-123.20	2.291	447.0
500	11.121	34.953	4.97	11.058	26.729	35.496	43.880	1.007	21.7	-15.62	-1.983	-108.18	2.147	496.6
600	10.026	34.819	5.02	9.955	26.818	35.634	44.062	1.141	29.6	-11.63	-1.295	-82.87	1.879	595.7
700	8.906	34.727	4.90	8.829	26.932	35.797	44.272	1.279	38.2	-11.72	-0.844	-102.72	2.092	694.8
800	8.073	34.691	4.09	7.989	27.033	35.936	44.447	1.400	47.5	-15.85	-1.032	-131.61	2.368	793.8
900	6.180	34.587	3.93	6.097	27.214	36.207	44.802	1.507	56.8	-14.85	0.213	-175.65	2.736	892.7
1000	4.944	34.632	3.42	4.861	27.399	36.452	45.103	1.595	65.2	-7.90	0.483	-108.92	2.154	991.6
1200	3.326	34.673	3.65	3.239	27.682	36.737	45.466	1.728	88.1	-4.49	0.130	-50.04	1.460	1189.1
1400	2.908	34.703	3.99	2.809	27.665	36.823	45.573	1.837	94.6	-1.44	0.142	-21.66	0.961	1386.5
1600	2.731	34.731	4.16	2.617	27.705	36.873	45.632	1.938	110.0	-0.82	0.148	-16.44	0.837	1583.7
1800	2.584	34.761	4.41	2.456	27.743	36.919	45.685	2.033	126.4	-0.58	0.125	-13.00	0.744	1780.6
2000	2.521	34.779	4.56	2.376	27.764	36.944	45.714	2.124	144.0	-0.46	0.092	-9.92	0.650	1977.4
2200	2.444	34.797	4.76	2.282	27.786	36.971	45.746	2.212	163.0	-0.38	0.073	-9.92	0.000	2174.0
2247	2.428	34.800	4.77	2.263	27.790	36.976	45.752	2.233	167.6	-0.43	0.079	-9.92	0.000	2220.2

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
12	12.7	23.071	23.068	24.212	32.568	40.567	35.395	35.395	5.07	1.84		0.00	3.01			12	222252255
11	104.6	17.725	17.707	25.836	34.350	42.497	35.644	35.637	4.95	3.09		2.40	0.06			103	222252255
10	305.7	14.130	14.085	26.441	35.086	43.354	35.355	35.352	5.00	4.34		8.10	0.01			303	222252255
9	502.4	11.026	10.964	26.736	35.507	43.895	34.944	34.944	5.00	6.12		14.70	0.00			497	222252255
7	850.1	6.616	6.536	27.156	36.128	44.703	34.590	34.568	4.16	49.73		28.40	0.01			841	222252255
6	1003.4	4.782	4.700	27.415	36.476	45.134	34.632	34.640	3.35	66.07		34.10	-0.01			993	222252255
4	1606.7	2.723	2.609	27.703	36.871	45.631	34.732	34.725	4.15	80.72		32.20	-0.01			1588	222252255
3	1901.4	2.550	2.553	27.752	36.930	45.699	34.772		4.50	74.91		30.40	-0.01			1878	252252255
2	2106.3	2.467	2.467	27.776	36.959	45.732	34.791		4.71							2079	252555555

CRUISE: CD 29 STA: 7 DATE (D/M/Y): 14-11-87 TIME: 1219 LAT: 31 6.12 S LONG: 30 27.82 E

GRAVITY= 9.7941 M/S CORIOLIS= -.75337E-04 1/S SOUND SPEED= 1494.2 M/S Depth= 1739 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	23.480	35.377	4.98	23.480	24.081	32.427	40.415	0.000	0.0	-0.21	0.000	0.00	0.000	0.0
1	23.480	35.377	4.98	23.480	24.081	32.427	40.415	0.004	0.0	-0.41	0.000	0.00	0.000	1.0
20	23.222	35.382	5.13	23.217	24.162	32.514	40.509	0.076	0.1	-53.47	3.699	-1351.93	7.596	19.9
30	22.888	35.407	5.20	22.882	24.278	32.639	40.643	0.113	0.2	-20.53	1.334	-510.61	4.668	29.9
40	21.438	35.505	5.14	21.430	24.762	33.163	41.204	0.148	0.3	-145.05	9.911	-3536.37	12.285	39.8
50	20.962	35.539	5.19	20.953	24.919	33.333	41.387	0.179	0.4	-49.82	2.625	-1148.71	7.002	49.8
100	17.953	35.640	5.00	17.936	25.779	34.287	42.426	0.306	1.4	-31.94	-0.353	-566.07	4.915	99.5
125	17.215	35.613	4.79	17.194	25.939	34.471	42.634	0.361	2.0	-24.82	-0.912	-411.23	4.189	124.4
150	16.684	35.580	4.72	16.660	26.041	34.592	42.772	0.412	2.7	-21.52	-1.941	-279.13	3.451	149.2
200	15.894	35.520	4.69	15.863	26.180	34.758	42.965	0.510	4.5	-16.61	-1.099	-221.21	3.073	198.9
250	15.066	35.441	4.73	14.968	26.320	34.931	43.168	0.601	6.6	-26.60	-3.727	-225.59	3.103	248.5
300	14.078	35.335	4.74	14.034	26.440	35.086	43.356	0.687	9.0	-13.69	-1.195	-149.93	2.530	298.2
350	13.079	35.203	4.57	13.031	26.545	35.231	43.538	0.760	11.7	-23.92	-3.612	-161.22	2.623	347.8
400	12.100	35.087	4.44	12.127	26.633	35.356	43.697	0.846	14.6	-15.86	-1.868	-127.55	2.333	397.4
450	11.485	35.006	4.51	11.427	26.702	35.454	43.823	0.919	17.8	-15.45	-1.841	-115.96	2.225	447.0
500	10.598	34.902	4.51	10.537	26.782	35.572	43.976	0.990	21.2	-17.60	-1.926	-132.85	2.381	496.6
600	9.075	34.754	4.44	9.008	26.924	35.781	44.248	1.122	28.6	-15.29	-1.336	-118.19	2.246	595.7
700	7.547	34.651	3.93	7.477	27.077	36.004	44.537	1.240	36.4	-14.76	-1.004	-115.96	2.225	694.7
800	6.243	34.590	3.88	6.170	27.207	36.197	44.788	1.344	44.4	-14.69	-0.567	-125.76	2.317	793.7
900	5.397	34.617	3.54	5.320	27.334	36.364	44.994	1.434	52.2	-6.82	1.255	-141.71	2.459	892.6
1000	4.226	34.646	3.42	4.148	27.489	36.578	45.262	1.510	59.5	-9.13	0.105	-94.67	2.010	991.5
1200	3.303	34.665	3.70	3.217	27.597	36.734	45.464	1.634	73.4	-2.86	0.109	-32.67	1.181	1189.0
1400	2.866	34.709	3.96	2.768	27.674	36.834	45.586	1.743	87.9	-1.57	0.225	-27.69	1.087	1386.4
1600	2.698	34.740	4.22	2.585	27.714	36.884	45.644	1.841	102.9	-0.50	0.110	-11.59	0.703	1583.6
1783	2.666	34.750	4.34	2.538	27.727	36.899	45.661	1.928	117.9	0.04	-0.014	-11.59	0.000	1763.8

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
13	13.2	23.294	23.291	24.132	32.482	40.475	35.374	35.378	5.07	2.43		0.20	0.04				13	222252255
12	153.3	16.495	16.470	26.076	34.633	42.820	35.572	35.552	4.71	5.08		5.80	0.05				152	222252255
11	308.0	13.434	13.390	26.562	35.233	43.526	35.324	35.204	4.14	10.75		14.10	0.06				305	222252255
10	505.7	10.405	10.376	26.808	35.606	44.017	34.895		4.49	12.35		18.40	0.03				501	252252255
9	602.6	8.753	8.687	26.970	35.841	44.322	34.751	34.720	4.39	18.89		23.20	0.05				597	222252255
8	705.0	7.358	7.288	27.095	36.031	44.572	34.644	34.632	4.08	29.85		27.30	0.03				698	222252255
7	808.9	5.852	5.781	27.256	36.265	44.873	34.594	34.569	3.89	45.42		30.90	0.03				801	222252255
6	1001.9	4.291	4.212	27.479	36.565	45.246	34.646	34.643	3.45	71.05		34.40	0.03				991	222252255
5	1204.1	3.107	3.022	27.620	36.767	45.506	34.674	34.654	3.99	77.97		34.10	0.04				1191	222252255
4	1404.1	2.871	2.772	27.671	36.831	45.582	34.710	34.708	3.99	80.99		32.90	0.02				1388	222252255
3	1599.9	2.698	2.586	27.712	36.881	45.641	34.740	34.737	4.24	78.55		31.80	0.04				1581	222252255
2	1779.7	2.668	2.540	27.724	36.896	45.658	34.751	34.755		76.10		31.10	0.02				1758	225252255

CRUISE: CD 29 STA: 8 DATE (D/M/Y): 14-11-87 TIME: 1440 LAT: 31 2.91 S LONG: 30 24.17 E

GRAVITY= 9.7941 M/S CORIOLIS= -.75220E-04 1/S SOUND SPEED= 1499.6 M/S Depth= 905 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	22.591	35.308	5.26	22.591	24.286	32.657	40.668	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	22.591	35.308	5.26	22.591	24.286	32.657	40.669	0.004	0.0	-0.40	0.000	0.00	0.000	1.0
20	21.328	35.190	5.13	21.324	24.551	32.959	41.007	0.071	0.1	-27.76	-0.001	-563.56	4.908	19.9
30	21.231	35.198	4.99	21.225	24.585	32.996	41.046	0.105	0.2	-14.29	1.590	-377.85	4.019	29.9
40	21.103	35.210	4.86	21.095	24.629	33.044	41.097	0.138	0.3	-14.85	5.839	-626.27	5.174	39.8
50	20.574	35.409	4.37	20.564	24.924	33.352	41.418	0.170	0.4	-92.64	15.032	-2680.04	10.703	49.8
100	17.618	35.392	3.60	17.601	25.671	34.192	42.345	0.302	1.4	-45.48	-0.284	-809.26	5.881	99.5
125	16.743	35.386	3.69	16.722	25.878	34.428	42.609	0.358	2.1	-24.60	-0.624	-409.33	4.183	124.4
150	16.130	35.364	3.72	16.106	26.004	34.576	42.776	0.411	2.8	-31.70	-0.862	-475.63	4.509	149.2
200	14.618	35.303	3.95	14.588	26.296	34.923	43.174	0.506	4.5	-22.48	-1.210	-295.85	3.556	198.9
250	13.668	35.237	4.18	13.633	26.448	35.111	43.396	0.591	6.4	-18.44	-1.544	-200.09	2.925	248.5
300	12.993	35.190	4.61	12.952	26.550	35.239	43.550	0.671	8.7	-13.70	-1.238	-137.67	2.426	298.2
350	12.201	35.089	4.42	12.155	26.629	35.351	43.691	0.748	11.2	-17.21	-2.087	-133.15	2.386	347.8
400	11.002	34.951	4.59	10.953	26.746	35.518	43.906	0.820	14.0	-27.03	-3.116	-198.68	2.914	397.4
450	10.091	34.848	4.57	10.038	26.827	35.639	44.063	0.887	16.9	-13.87	-1.269	-111.15	2.180	447.0
500	9.311	34.781	4.42	9.255	26.906	35.751	44.208	0.951	20.0	-15.61	-1.148	-131.80	2.374	496.5
600	7.927	34.674	4.11	7.865	27.039	35.947	44.463	1.068	26.5	-6.35	-0.388	-51.81	1.488	595.6
700	5.991	34.547	4.11	5.929	27.204	36.206	44.808	1.173	33.5	-12.82	-0.450	-114.96	2.217	694.7
800	5.416	34.565	3.81	5.348	27.290	36.319	44.948	1.265	40.5	-6.80	0.540	-101.90	2.087	793.6
893	5.005	34.610	3.53	4.931	27.374	36.424	45.071	1.342	47.2	-4.45	-0.008	-101.90	0.000	885.6

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
24	11.4	22.102	22.100	24.393	32.777	40.883	35.269	35.256	5.03	3.68			1.10	0.14			11	222252255
23	52.5	20.093	20.083	25.077	33.520	41.598	35.445	35.495	4.60	4.05			3.20	0.07			52	222252255
22	102.7	17.421	17.403	25.717	34.245	42.404	35.393	35.398	3.66	9.31			10.50	0.08			101	222252255
21	202.3	14.363	14.334	26.345	34.981	43.241	35.299	35.292	4.05	9.85			12.40	0.02			200	222252255
20	300.7	12.989	12.948	26.546	35.235	43.546	35.187	35.186	4.57	7.94			12.30	0.01			298	222252255
19	402.4	11.060	11.010	26.731	35.500	43.886	34.948	34.957	4.57	10.58			16.40	0.01			398	222252255
18	502.5	9.081	9.025	26.939	35.795	44.261	34.780	34.764	4.36	18.13			21.11	0.00			498	222252255
17	609.2	7.829	7.767	27.046	35.960	44.480	34.670	34.666	4.01	27.09			21.11	0.00			603	222252255
16	707.4	6.069	6.005	27.194	36.192	44.791	34.551	34.547	4.10	37.11			29.20	0.00			700	222252255
15	803.1	5.501	5.432	27.289	36.314	44.939	34.581	34.593	3.67	50.63			31.60	0.00			795	222252255
14	894.3	4.975	4.901	27.375	36.426	45.076	34.611	34.609	3.52	58.73			32.70	0.00			885	222252255

CRUISE: CD 29 STA: 9 DATE (D/M/Y): 14-11-87 TIME: 1637 LAT: 31 2.95 S LONG: 30 22.07 E

GRAVITY= 9.7941 M/S CORIOLIS= -.75221E-04 1/S SOUND SPEED= 1514.7 M/S Depth= 290 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	22.277	35.261	5.04	22.277	24.339	32.719	40.740	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	22.277	35.261	5.04	22.277	24.339	32.719	40.740	0.004	0.0	-0.40	0.000	0.00	0.000	1.0
20	21.235	35.192	4.98	21.231	24.578	32.989	41.039	0.070	0.1	-3.39	1.644	-160.72	2.621	19.9
30	21.138	35.211	4.91	21.132	24.620	33.034	41.086	0.103	0.2	-9.77	1.380	-274.53	3.426	29.9
40	21.043	35.266	4.58	21.036	24.688	33.104	41.158	0.136	0.3	-33.69	16.751	-1615.76	8.310	39.8
50	20.405	35.358	3.90	20.396	24.931	33.365	41.436	0.168	0.4	-72.98	-0.311	-1420.46	7.792	49.8
100	16.912	35.370	3.61	16.895	25.824	34.369	42.545	0.296	1.4	-59.06	-0.996	-986.11	6.492	99.5
125	15.677	35.355	3.77	15.657	26.100	34.688	42.903	0.347	2.0	-30.12	-0.755	-490.20	4.577	124.4
150	15.104	35.338	3.91	15.081	26.215	34.824	43.058	0.395	2.6	-23.06	-0.805	-334.16	3.779	149.2
200	14.333	35.307	4.17	14.304	26.361	34.998	43.259	0.484	4.2	-17.35	-1.164	-212.17	3.011	198.9
247	13.503	35.221	4.24	13.468	26.470	35.139	43.431	0.562	6.0	-22.46	-2.898	-212.17	0.000	245.5

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
4	54.4	20.097	20.087	25.011	33.454	41.514	35.359	35.359	4.10	6.11			6.50	0.39		0.000	53	222252255
3	107.1	16.517	16.500	25.914	34.473	42.661	35.370	35.367	3.71	9.64			11.40	0.06			106	222252255
2	202.9	14.114	14.085	26.403	35.048	43.317	35.305	35.297	4.25	8.42			11.60	0.02			201	222252255
1	248.8	13.402	13.367	26.490	35.163	43.458	35.225	35.202	4.27	9.49			13.10	0.02			246	222252255

CRUISE: CD 29 STA: 10 DATE (D/M/Y): 14-11-87 TIME: 1720 LAT: 31 2.31 S LONG: 30 21.21 E

GRAVITY= 9.7941 M/S CORIOLIS= -.75198E-04 1/S SOUND SPEED= 1524.8 M/S Depth= 90 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
0	22.005	35.241	4.93	22.005	24.401	32.789	40.817	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	22.005	35.241	4.93	22.005	24.401	32.789	40.817	0.004	0.0	-0.40	0.000	0.00	0.000	1.0
20	21.400	35.190	4.89	21.397	24.531	32.937	40.983	0.069	0.1	-5.45	0.072	-114.73	2.215	19.9
30	21.272	35.197	5.03	21.266	24.572	32.982	41.031	0.103	0.2	-32.59	3.254	-841.92	6.000	29.9
40	21.100	35.230	4.93	21.093	24.645	33.060	41.113	0.136	0.3	-26.01	3.175	-700.90	5.474	39.8
50	20.419	35.325	4.35	20.410	24.902	33.336	41.407	0.168	0.4	-99.02	9.539	-2487.15	10.312	49.8
65	18.501	35.387	3.88	18.489	25.447	33.940	42.066	0.210	0.7	-114.23	7.171	-2487.15	0.000	64.7

BOTL	PRES	CTDTP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
8	12.4	21.583	21.580	24.478	32.879	40.919	35.191	35.170	5.00	4.47		1.60	0.24			12	22252255
7	53.8	20.038	20.028	25.018	33.463	41.545	35.348	35.341	4.25	5.88		5.90	0.46			53	22252255
6	77.0	16.884	16.871	25.838	34.383	42.559	35.384	35.385	3.67	9.04		10.70	0.06			76	22252255

CRUISE: CD 29 STA: 11 DATE (D/M/Y): 15-11-87 TIME: 0332 LAT: 30 18.46 S LONG: 31 19.84 E

GRAVITY= 9.7935 M/S CORIOLIS= -.73598E-04 1/S SOUND SPEED= 1500.0 M/S Depth= 1178 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
0	22.849	35.365	4.81	22.849	24.255	32.618	40.623	0.000	0.0	-0.20	0.000	0.00	0.000	0.0
1	22.849	35.365	4.81	22.849	24.256	32.618	40.623	0.004	0.0	-0.41	0.000	0.00	0.000	1.0
20	22.775	35.390	5.02	22.771	24.297	32.662	40.668	0.073	0.1	-34.75	4.684	-974.37	6.524	19.9
30	22.461	35.427	5.02	22.455	24.415	32.788	40.802	0.109	0.2	-167.07	14.192	-4160.96	13.482	29.9
40	21.026	35.543	5.28	21.018	24.904	33.317	41.369	0.141	0.3	-3.99	1.367	-153.63	2.591	39.8
50	20.862	35.558	5.24	20.853	24.960	33.378	41.434	0.171	0.4	-152.21	4.511	-3199.04	11.821	49.8
100	18.062	35.598	4.70	18.044	25.720	34.225	42.362	0.297	1.4	-28.27	-0.567	-475.37	4.557	99.5
125	17.283	35.586	4.86	17.262	25.902	34.432	42.593	0.352	2.0	-30.17	-0.080	-543.62	4.873	124.4
150	16.756	35.545	4.56	16.731	25.997	34.546	42.724	0.405	2.7	-16.59	-1.582	-203.53	2.982	149.2
200	15.846	35.499	4.00	15.814	26.175	34.755	42.964	0.504	4.5	-21.86	-1.256	-295.06	3.590	198.9
250	14.943	35.429	4.93	14.905	26.325	34.938	43.177	0.595	6.6	-15.82	-1.451	-174.50	2.761	248.5
300	14.188	35.350	4.98	14.144	26.428	35.070	43.337	0.682	9.0	-16.30	-1.979	-145.28	2.519	298.2
350	13.451	35.249	4.95	13.401	26.505	35.176	43.470	0.764	11.7	-13.65	-1.752	-110.29	2.195	347.8
400	12.801	35.166	4.95	12.746	26.573	35.270	43.588	0.844	14.8	-11.57	-1.385	-94.84	2.035	397.4
450	12.266	35.096	4.96	12.206	26.625	35.344	43.683	0.921	18.1	-12.26	-1.648	-86.36	1.942	447.0
500	11.367	34.972	4.91	11.303	26.699	35.456	43.830	0.996	21.8	-10.06	-2.223	-101.54	2.106	496.6
600	10.062	34.813	4.91	9.991	26.808	35.621	44.048	1.138	29.7	-14.40	-1.646	-97.27	2.061	595.7
700	8.566	34.662	4.78	8.490	26.934	35.815	44.305	1.269	38.4	-13.81	-1.165	-104.54	2.137	694.8
800	7.678	34.644	4.13	7.596	27.054	35.976	44.504	1.388	47.5	-18.31	0.436	-220.76	3.105	793.8
900	4.633	34.627	3.61	4.561	27.429	36.497	45.162	1.480	55.4	-8.57	0.135	-93.75	2.024	892.7
1000	4.393	34.628	3.51	4.314	27.457	36.538	45.215	1.553	62.5	-2.29	0.011	-22.76	0.997	991.5
1175	3.490	34.633	3.62	3.404	27.554	36.682	45.403	1.672	75.7	-8.24	0.028	-22.76	0.000	1164.4

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTD	SAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	KG/M3	PSS78	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
15	54.5	19.918	19.908	25.244	33.690	41.772	35.597	0.000			5.21		0.23	0.30	0.04	1.904	1.083	54	222522222
14	84.4	18.461	18.446	25.625	34.116	42.240	35.602	35.608				0.45	3.70	0.04	1.903	1.151	83	222522222	
13	168.3	16.613	16.586	26.021	34.574	42.758	35.529	35.571	4.87			0.46	4.70	0.04	2.026	1.176	166	222522222	
12	238.8	15.106	15.069	26.303	34.910	43.144	35.446	35.452	4.88			0.62	6.90	0.03	1.966	1.097	236	222522222	
11	291.7	14.264	14.221	26.425	35.065	43.328	35.366	35.369	4.99			0.69	7.90	0.03	1.992	1.189	289	222522222	
10	393.7	12.871	12.817	26.571	35.266	43.581	35.180	35.182	4.98			0.85	10.80	0.01	1.724	1.015	390	222522222	
8	495.4	11.615	11.551	26.661	35.408	43.772	34.980	35.018	5.00			1.02	13.30	0.01	1.425	0.872	491	222522222	
5	844.7	6.102	6.025	27.245	36.241	44.838	34.612	34.623	3.69			2.24	30.50	0.01	0.240	0.196	836	222522222	
4	1009.0	4.377	4.297	27.461	36.542	45.220	34.628	34.631	3.44			2.49	33.90	0.00	0.077		998	222522225	
3	1005.2	4.384	4.305	27.460	36.541	45.218	34.628	34.632	3.46			2.49	34.00	0.00	0.055		995	222522225	
2	1124.3	3.505	3.402	27.543	35.667	45.384	34.627	34.629	3.64			2.48	34.00	0.00	0.045		1112	222522225	

CRUISE: CD 29 STA: 12 DATE (D/M/Y): 16-11-87 TIME: 0148 LAT: 31 34.73 S LONG: 31 9.67 E

GRAVITY= 9.7945 M/S CORIOLIS= -.76373E-04 1/S SOUND SPEED= 1500.0 M/S Depth= 3091 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	1/DB 10-3	(m s)-1 10-12	CPH	METERS
0	20.828	35.588	5.18	20.828	24.989	33.407	41.464	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.828	35.588	5.18	20.828	24.990	33.407	41.464	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	20.827	35.592	5.25	20.823	24.994	33.412	41.469	0.059	0.1	-6.99	0.460	-168.05	2.660	19.9
30	20.615	35.606	5.25	20.609	25.062	33.487	41.549	0.089	0.1	-109.02	4.765	-2454.40	10.165	29.9
40	18.900	35.661	5.47	18.973	25.535	34.009	42.117	0.115	0.2	-61.54	1.343	-1259.65	7.282	39.8
50	18.611	35.660	5.33	18.603	25.628	34.113	42.233	0.140	0.3	-30.59	-0.063	-576.07	4.925	49.0
100	17.700	35.642	5.22	17.683	25.843	34.358	42.506	0.252	1.2	-14.73	-0.446	-245.40	3.214	99.5
125	17.350	35.642	5.26	17.329	25.929	34.456	42.614	0.306	1.8	-6.20	0.465	-145.70	2.477	124.3
150	17.258	35.641	5.32	17.233	25.952	34.482	42.643	0.358	2.6	-3.61	-0.197	-54.95	1.521	149.2
200	17.093	35.630	5.25	17.060	25.984	34.520	42.687	0.463	4.4	-4.00	-0.336	-53.00	1.495	198.8
250	16.296	35.540	4.90	16.256	26.105	34.669	42.863	0.565	6.8	-18.55	-1.594	-236.66	3.156	248.5
300	15.462	35.481	4.93	15.415	26.251	34.846	43.068	0.662	9.5	-16.13	-1.296	-202.52	2.920	298.2
350	14.827	35.421	5.03	14.774	26.347	34.965	43.209	0.752	12.5	-12.65	-1.279	-138.65	2.416	347.8
400	14.244	35.358	5.00	14.185	26.426	35.066	43.331	0.840	15.8	-15.36	-1.768	-150.40	2.516	397.4
450	13.442	35.255	5.02	13.378	26.515	35.187	43.481	0.924	19.4	-14.35	-2.000	-113.37	2.185	447.0
500	12.849	35.175	5.09	12.780	26.574	35.269	43.586	1.005	23.4	-13.01	-1.681	-105.34	2.106	496.6
600	11.630	35.008	5.06	11.552	26.681	35.427	43.791	1.159	32.0	-11.03	-1.460	-78.74	1.821	595.7
700	10.484	34.865	5.06	10.308	26.778	35.574	43.984	1.306	41.7	-13.10	-1.532	-94.59	1.996	694.8
800	9.122	34.714	4.90	9.032	26.889	35.745	44.212	1.442	52.2	-12.37	-1.205	-92.87	1.977	793.8
900	7.597	34.589	4.66	7.505	27.024	35.950	44.483	1.568	63.1	-15.32	-1.103	-123.85	2.283	892.8
1000	6.613	34.577	4.16	6.517	27.151	36.124	44.700	1.681	74.0	-11.45	-0.497	-103.53	2.088	991.7
1200	4.864	34.43	3.86	4.764	27.340	36.399	45.056	1.872	95.3	-6.35	0.173	-76.05	1.789	1189.3
1400	3.746	34.573	3.81	3.638	27.483	36.599	45.310	2.030	116.2	-2.96	0.445	-56.17	1.538	1386.7
1600	3.272	34.652	3.72	3.152	27.593	36.734	45.467	2.163	136.6	-2.30	0.362	-44.58	1.370	1583.9
1800	2.919	34.702	3.91	2.786	27.666	36.826	45.576	2.278	156.5	-1.33	0.197	-25.07	1.027	1780.9
2000	2.699	34.742	4.23	2.551	27.720	36.891	45.653	2.382	176.6	-0.97	0.187	-21.05	0.941	1977.7
2200	2.574	34.772	4.51	2.411	27.755	36.933	45.702	2.479	197.4	-0.55	0.110	-12.23	0.718	2174.3
2400	2.485	34.793	4.76	2.305	27.781	36.964	45.738	2.572	219.2	-0.51	0.085	-10.54	0.666	2370.7
2600	2.410	34.806	4.92	2.211	27.799	36.988	45.766	2.662	242.3	-0.50	0.054	-8.76	0.607	2566.9
2800	2.302	34.815	5.06	2.087	27.817	37.012	45.797	2.751	266.6	-0.79	0.023	-10.36	0.660	2763.0
3000	2.141	34.813	5.15	1.910	27.829	37.034	45.828	2.837	292.0	-1.19	-0.045	-11.22	0.687	2958.9
3107	1.973	34.804	5.18	1.734	27.835	37.050	45.853	2.881	305.9	-1.67	-0.082	-11.22	0.000	3063.6

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
23	68.9	18.266	18.254	25.720	34.217	42.346	35.664	35.670	5.13	2.61	0.30	1.70	0.16	2.175	0.000	68	222222222
21	193.2	17.054	17.022	25.993	34.530	42.698	35.627	35.631	5.34	3.30	0.41	2.60	0.06	2.340	1.206	191	222222222
18	493.5	12.834	12.766	26.581	35.278	43.595	35.180	35.179	5.02	5.00	0.89	10.00	0.02	1.703	0.999	489	222222222
17	589.7	11.673	11.596	26.686	35.431	43.793	35.024	35.021	5.00	6.04	1.08	12.40	0.04	1.451	0.877	584	222222222
14	940.2	7.099	7.007	27.069	36.019	44.574	34.555	34.558	4.54	23.45	1.88	24.10	0.02	0.539	0.328	930	222222222
13	1088.6	5.409	5.314	27.248	36.280	44.911	34.505	34.496	4.21	39.66	2.20	28.40	0.01	0.290	0.158	1077	222222222
12	1139.9	4.850	4.756	27.285	36.346	45.004	34.471	34.465	4.29	42.56	2.24	29.20	0.01	0.398	0.232	1128	222222222
11	1252.4	4.105	4.006	27.371	36.470	45.164	34.477	34.484	4.26	53.65	2.37	30.60	0.01	0.364	0.252	1239	222222222
10	1393.3	3.908	3.799	27.473	36.581	45.283	34.578	34.591	3.63	68.67	2.48	31.60	0.01	0.112	0.111	1378	222222222
8	1793.7	2.927	2.795	27.667	36.825	45.576	34.701	34.700	3.99	80.44	2.35	30.40	0.02	0.029		1772	222222225
7	1993.6	2.718	2.571	27.718	36.888	45.649	34.740	34.737	4.22					0.018		1968	222555525
6	2195.9	2.580	2.417	27.756	36.934	45.702	34.771	34.774	4.51					0.024	0.022	2167	222555522
5	2395.4	2.488	2.308	27.782	36.965	45.739	34.792	34.792	4.73	70.37	2.04	26.90	0.03	0.032	0.029	2363	222222222
4	2597.6	2.411	2.213	27.801	36.989	45.767	34.806	34.807	4.97	67.47	1.94	25.80	0.01	0.020		2561	222222225
3	2796.7	2.302	2.087	27.818	37.013	45.798	34.815	34.815	5.04	67.30	1.90	25.50	0.01	0.002	0.023	2756	222222222
2	2998.8	2.144	1.913	27.830	37.035	45.829	34.813	34.811	5.15	70.88	1.92	25.60	0.01	0.000	0.033	2954	222222222
1	3113.6	1.972	1.733	27.837	37.052	45.855	34.804	34.805	5.08	75.82	1.92	25.70	0.02			3067	222222225

CRUISE: CD 29 STA: 13 DATE (D/M/Y): 16-11-87 TIME: 1138 LAT: 31 56.62 S LONG: 31 36.31 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77163E-04 1/S SOUND SPEED= 1502.8 M/S Depth= 3535 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.816	35.572	4.81	20.816	24.981	33.399	41.456	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.816	35.572	4.81	20.816	24.981	33.399	41.456	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	20.815	35.572	5.11	20.811	24.982	33.401	41.457	0.059	0.1	-0.93	-0.018	-18.04	0.867	19.9
30	20.808	35.571	5.18	20.802	24.984	33.403	41.460	0.089	0.1	-0.48	0.057	-13.16	0.741	29.9
40	20.799	35.572	5.07	20.792	24.988	33.407	41.464	0.119	0.2	-3.61	0.147	-82.52	1.854	39.8
50	20.565	35.581	5.18	20.555	25.058	33.484	41.548	0.149	0.4	-121.58	3.262	-2646.57	10.502	49.8
100	18.383	35.653	4.98	18.365	25.683	34.176	42.302	0.274	1.3	-17.90	0.606	-376.87	3.963	99.5
125	18.048	35.644	4.91	18.026	25.760	34.264	42.401	0.332	2.0	-11.85	-0.508	-193.59	2.840	124.3
150	17.708	35.635	4.98	17.682	25.838	34.353	42.501	0.388	2.8	-10.67	-0.254	-192.08	2.829	149.2
200	17.334	35.623	5.07	17.301	25.921	34.450	42.609	0.496	4.7	-7.59	-0.541	-108.57	2.127	198.9
250	16.869	35.607	5.18	16.828	26.022	34.566	42.741	0.602	7.1	-13.19	-1.021	-179.88	2.738	248.5
300	15.971	35.520	4.80	15.924	26.166	34.742	42.947	0.702	9.9	-12.56	-0.744	-178.84	2.730	298.2
350	15.317	35.465	4.82	15.263	26.273	34.874	43.101	0.797	13.1	-17.09	-1.831	-188.44	2.802	347.8
400	14.479	35.371	4.81	14.419	26.385	35.017	43.274	0.887	16.5	-10.84	-0.746	-138.87	2.406	397.5
450	14.048	35.335	4.93	13.982	26.451	35.099	43.371	0.973	20.3	-11.77	-1.789	-90.02	1.937	447.1
500	13.353	35.227	4.84	13.282	26.512	35.188	43.486	1.058	24.4	-18.17	-2.861	-125.00	2.282	496.6
600	12.069	35.061	4.91	11.989	26.640	35.368	43.715	1.218	33.3	-13.51	-1.687	-109.01	2.131	595.8
700	10.867	34.914	4.90	10.780	26.749	35.528	43.923	1.368	43.3	-12.30	-1.494	-91.85	1.956	694.9
800	9.713	34.781	4.84	9.619	26.846	35.676	44.118	1.510	54.1	-11.94	-1.251	-91.91	1.957	793.9
900	8.576	34.679	4.61	8.477	26.949	35.831	44.321	1.643	65.6	-12.73	-0.958	-110.57	2.147	892.8
1000	7.301	34.588	4.41	7.201	27.066	36.007	44.553	1.764	77.3	-11.89	-0.741	-101.98	2.061	991.8
1200	5.805	34.594	3.80	5.696	27.270	36.283	44.895	1.973	100.8	-7.85	-0.162	-78.09	1.804	1189.4
1400	4.250	34.567	3.74	4.137	27.428	36.518	45.204	2.147	123.8	-4.31	0.286	-63.31	1.624	1386.8
1600	3.586	34.626	3.67	3.463	27.543	36.667	45.385	2.293	146.1	-3.26	0.263	-49.83	1.441	1584.0
1800	3.087	34.686	3.83	2.952	27.639	36.790	45.532	2.418	167.7	-2.12	0.231	-35.91	1.223	1781.0
2000	2.797	34.727	4.06	2.648	27.699	36.865	45.622	2.528	189.0	-1.29	0.197	-25.33	1.027	1977.8
2200	2.621	34.761	4.33	2.457	27.743	36.919	45.635	2.629	210.6	-0.66	0.131	-14.93	0.789	2174.4
2400	2.526	34.783	4.55	2.344	27.770	36.951	45.723	2.725	233.0	-0.51	0.101	-11.63	0.696	2370.8
2600	2.456	34.802	4.78	2.257	27.792	36.979	45.754	2.817	256.7	-0.53	0.090	-11.29	0.686	2567.1
2800	2.350	34.815	4.95	2.133	27.812	37.005	45.787	2.907	281.4	-0.65	0.039	-9.89	0.642	2763.1
3000	2.206	34.817	5.07	1.973	27.827	37.029	45.819	2.995	307.3	-0.82	-0.017	-8.81	0.606	2959.0
3200	2.067	34.810	5.12	1.817	27.834	37.044	45.843	3.080	334.3	-0.98	-0.053	-8.82	0.606	3154.7
3400	1.841	34.794	5.13	1.576	27.839	37.063	45.875	3.163	362.3	-1.78	-0.123	-14.62	0.780	3350.2
3500	1.492	34.768	5.12	1.219	27.844	37.089	45.919	3.229	385.8	-2.47	-0.173	-14.62	0.000	3513.4

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	5.1	20.444	20.843	24.975	33.393	41.449	35.572	35.580	5.23	1.70	0.18	0.20	0.01	1.863	0.999	5	222222222
23	92.8	18.429	18.413	25.666	34.158	42.283	35.645	35.657	5.04	2.90	0.32	2.10	0.09	2.022	1.057	92	222222222
22	193.8	17.281	17.248	25.933	34.463	42.624	35.620	35.622	5.08	3.40	0.38	3.50	0.04			192	222222255
21	292.3	15.969	15.923	26.167	34.743	42.948	35.519	35.533	4.85	3.90	0.50	5.80	0.03			289	222222255
20	393.1	14.604	14.545	26.369	34.996	43.248	35.383	35.401	4.90	4.40	0.63	7.90	0.02	1.845	1.040	389	222222222
19	493.5	13.502	13.432	26.494	35.164	43.457	35.241	35.300	4.94	4.60		8.70	0.02	1.816	1.054	489	222252222
18	591.7	12.447	12.366	26.586	35.299	43.632	35.084	35.117	4.91	5.50	0.45	12.10	0.02	1.470	0.848	586	222222222
17	692.4	11.232	11.144	26.693	35.457	43.838	34.925	34.966	4.99	6.30	1.11	14.50	0.02	1.350	0.725	685	222222222
14	1091.4	6.414	6.310	27.143	36.126	44.712	34.530	34.545	4.21	32.00	2.08	28.90	0.01	0.371	0.231	1080	222222222
13	1141.6	5.974	5.870	27.211	36.215	44.821	34.544	34.540	4.04	38.80	2.21	30.50	0.02			1129	222222255
12	1250.5	5.124	5.016	27.295	36.341	44.987	34.520	34.519	3.94	47.00	2.39	32.30	0.02			1237	222222255
11	1393.9	4.336	4.222	27.421	36.507	45.189	34.568	34.561	3.65	61.80	2.46	33.90	0.01			1378	222222255
10	1594.5	3.617	3.494	27.541	36.664	45.381	34.626	34.620	3.63	74.00	2.57	34.40	0.02			1576	222222255
9	1795.4	3.154	3.019	27.633	36.780	45.519	34.684	34.687	3.75	80.70	2.45	33.90	0.03			1774	222222255
8	1995.7	2.812	2.663	27.698	36.864	45.620	34.726	34.722	4.10	79.30	2.32	32.20	0.01			1971	222222255
7	2194.4	2.634	2.470	27.742	36.918	45.683	34.760	34.759	4.41	75.40	2.24	30.70	0.00	0.012		2166	222222225
5	2596.6	2.456	2.257	27.794	36.980	45.756	34.802	34.804	4.87	66.90	1.95	28.30	0.00			2560	222222255
4	2796.8	2.345	2.129	27.814	37.007	45.789	34.814	34.814	5.02	66.40	1.90	27.70	0.00			2757	222222255
3	2998.2	2.210	1.977	27.829	37.030	45.820	34.817	34.816	5.10	68.70	1.89	27.60	0.01			2954	222222255
2	3500.0	1.632	1.362	27.844	37.080	45.903	34.778	34.780	5.08	88.40	2.07	29.50	0.00			3444	222222255
1	3572.0	1.492	1.470	27.846	37.090	45.921	34.768		5.04	92.50	2.05	29.80	0.01	0.006		3514	252222225

CRUISE: CD 29 STA: 14 DATE (D/M/Y): 16-11-87 TIME: 1947 LAT: 32 11.67 S LONG: 32 38.13 E

GRAVITY= 9.7950 M/S CORIOLIS= -.77784E-04 1/S SOUND SPEED= 1503.3 M/S Depth= 3551 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.614	35.588	5.45	20.614	25.048	33.472	41.534	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.614	35.588	5.45	20.614	25.048	33.472	41.534	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	20.637	35.586	5.28	20.633	25.041	33.465	41.526	0.058	0.1	0.19	-0.008	4.42	-0.428	19.9
30	20.643	35.586	5.24	20.637	25.040	33.464	41.525	0.087	0.1	0.62	-0.024	14.04	-0.762	29.9
40	20.645	35.586	5.32	20.637	25.040	33.463	41.525	0.117	0.2	-7.46	0.239	-167.15	2.630	39.8
50	20.270	35.608	5.24	20.261	25.158	33.592	41.664	0.146	0.4	-48.89	4.708	-1268.25	7.244	49.8
100	18.639	35.651	5.08	18.622	25.616	34.101	42.220	0.277	1.4	-25.00	0.476	-514.18	4.613	99.5
125	18.222	35.644	5.00	18.200	25.717	34.216	42.347	0.336	2.0	-17.14	-0.365	-309.80	3.580	124.3
150	17.811	35.638	5.07	17.785	25.815	34.327	42.471	0.392	2.8	-18.16	-0.724	-385.24	3.554	149.2
200	17.243	35.613	4.97	17.209	25.936	34.467	42.629	0.501	4.8	-12.22	-0.772	-181.21	2.738	198.9
250	16.536	35.556	4.78	16.495	26.062	34.618	42.804	0.605	7.2	-18.61	-1.874	-228.02	3.072	248.6
300	15.792	35.506	4.80	15.745	26.196	34.779	42.990	0.703	9.9	-15.32	-1.300	-194.28	2.835	298.2
350	14.958	35.433	4.80	14.905	26.328	34.941	43.181	0.796	13.0	-12.21	-1.126	-144.04	2.441	347.8
400	14.422	35.379	4.88	14.362	26.404	35.037	43.296	0.885	16.4	-13.29	-1.423	-140.36	2.410	397.5
450	13.824	35.308	4.92	13.759	26.476	35.133	43.413	0.970	20.1	-10.26	-1.303	-92.68	1.958	447.1
500	13.264	35.236	4.99	13.194	26.537	35.216	43.517	1.053	24.1	-12.32	-1.644	-102.45	2.059	496.6
600	12.076	35.072	4.96	11.996	26.647	35.375	43.721	1.212	33.0	-11.61	-1.559	-88.28	1.911	595.8
700	11.045	34.937	5.00	10.957	26.735	35.506	43.894	1.363	43.0	-11.40	-1.412	-85.42	1.880	694.9
800	10.013	34.814	4.94	9.917	26.822	35.638	44.068	1.507	54.0	-10.65	-1.163	-81.88	1.841	793.9
900	8.811	34.697	4.76	8.711	26.927	35.798	44.278	1.642	65.7	-13.86	-1.269	-110.36	2.137	892.8
1000	7.665	34.620	4.45	7.561	27.040	35.964	44.493	1.767	77.8	-6.68	0.041	-87.06	1.898	991.8
1200	5.735	34.521	4.17	5.626	27.221	36.238	44.855	1.986	102.4	-11.32	-0.691	-89.45	1.924	1189.4
1400	4.554	34.547	3.91	4.438	27.379	36.455	45.127	2.169	126.6	-2.19	0.621	-60.81	1.586	1386.8
1600	3.952	34.642	3.63	3.824	27.520	36.625	45.326	2.324	150.2	-3.17	0.426	-59.43	1.568	1584.0
1800	3.168	34.672	3.82	3.032	27.621	36.767	45.506	2.454	172.7	-2.52	0.193	-38.30	1.259	1781.0
2000	2.841	34.714	4.05	2.691	27.685	36.849	45.604	2.567	194.7	-1.27	0.191	-25.00	1.017	1977.9
2200	2.684	34.747	4.26	2.519	27.726	36.899	45.663	2.672	217.0	-0.81	0.144	-17.44	0.850	2174.5
2400	2.572	34.773	4.48	2.391	27.758	36.937	45.707	2.770	240.1	-0.53	0.118	-12.96	0.732	2370.9
2600	2.508	34.792	4.69	2.308	27.780	36.964	45.737	2.866	264.4	-0.49	0.089	-10.89	0.671	2567.1
2800	2.408	34.803	4.86	2.191	27.798	36.988	45.768	2.958	290.0	-0.55	0.040	-8.86	0.606	2763.2
3000	2.292	34.809	4.98	2.057	27.814	37.011	45.797	3.049	316.9	-1.04	0.018	-13.47	0.746	2959.1
3200	2.106	34.808	5.09	1.856	27.829	37.037	45.834	3.137	344.5	-0.82	-0.025	-8.44	0.591	3154.8
3400	1.858	34.795	5.15	1.593	27.839	37.061	45.872	3.221	372.9	-3.29	-0.222	-27.37	1.064	3350.3
3581	1.347	34.758	5.12	1.076	27.846	37.099	45.937	3.290	397.3	-1.16	-0.077	-27.37	0.000	3527.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	8.1	20.613	20.612	25.048	33.473	41.535	35.586	35.593	5.23	1.45	0.22	0.00	0.03			8	222222255
23	95.2	18.947	18.930	25.534	34.009	42.119	35.644	35.644	5.01	2.51	0.30	1.70	0.12			94	222222255
22	196.7	17.301	17.268	25.928	34.458	42.618	35.620	35.619	5.02	3.04	0.36	3.40	0.04			195	222222255
21	291.6	16.012	15.965	26.155	34.730	42.933	35.516	35.523	4.79	4.10	0.41	6.00	0.03	1.943	1.062	289	222222222
20	393.8	14.562	14.503	26.380	35.008	43.262	35.385	35.399	4.91	4.80	0.52	7.80	0.02			390	222222255
19	491.2	14.418	14.344	26.310	34.946	43.207	35.251	35.270	5.01	4.97	0.67	9.50	0.02			486	222222255
18	591.6	12.292	12.212	26.619	35.338	43.676	35.088	35.103	4.99	5.51	0.84	12.40	0.02	1.649	0.921	586	222222222
17	692.4	11.250	11.162	26.708	35.472	43.851	34.949	34.962	5.01	6.21	0.99	14.60	0.01	1.280	0.790	685	222222222
15	941.0	8.366	8.325	26.959	35.850	44.349	34.647		4.70					0.683	0.394	931	252555522
13	1144.7	6.041	5.935	27.223	36.224	44.826	34.570	34.509	4.34	32.13	1.97	29.20	0.01	0.319	0.194	1132	222222222
12	1194.5	5.741	5.633	27.219	36.235	44.852	34.517	34.516	4.17	37.89	2.09	30.40	0.01	0.378	0.225	1181	222222222
10	1593.5	3.951	3.824	27.508	36.613	45.314	34.625	34.620	3.60	71.43	2.43	34.40	0.00	0.054		1575	222222225
8	1998.9	2.861	2.711	27.684	36.848	45.602	34.714	34.715	4.05	79.21	2.25	32.40	0.00			1974	222222255
7	2197.9	2.678	2.513	27.728	36.901	45.665	34.747	34.749	4.37	76.91	2.21	31.10	-0.01			2169	222222255
6	2398.2	2.565	2.383	27.760	36.940	45.710	34.773	34.782	4.51	67.79	1.98	29.10	0.00			2366	222222255
5	2700.8	2.444	2.236	27.792	36.980	45.757	34.798	34.796	4.85	70.19	1.96	28.80	0.00			2663	222222255
4	2999.0	2.291	2.056	27.816	37.013	45.799	34.809	34.807	5.02	70.33	1.90	28.00	0.00			2954	222222255
3	3000.6	2.288	2.053	27.816	37.013	45.800	34.809	34.810	5.06	70.12	1.90	28.20	0.02			2956	222222255
2	3250.3	2.068	1.813	27.833	37.043	45.842	34.806	34.804	5.12	74.97	1.94	28.40	0.03			3200	222222255
1	3585.1	1.347	1.076	27.847	37.100	45.938	34.758	34.758	5.08	98.41	2.20	30.50	0.02			3527	222222255

CRUISE: CD 29 STA: 15 DATE (D/M/Y): 17-11-87 TIME: 0442 LAT: 32 32.75 S LONG: 33 24.74 E

GRAVITY= 9.7953 M/S CORIOLIS= -.78459E-04 1/S SOUND SPEED= 1502.7 M/S Depth= 3491 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.947	35.642	5.49	19.947	25.266	33.710	41.791	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.947	35.642	5.49	19.947	25.266	33.710	41.791	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.953	35.644	5.52	19.949	25.268	33.711	41.792	0.054	0.1	-0.22	0.026	-5.91	0.492	19.9
30	19.949	35.644	5.50	19.943	25.269	33.713	41.794	0.081	0.1	-9.72	0.582	-231.45	3.080	29.9
40	19.609	35.663	5.53	19.601	25.374	33.828	41.918	0.108	0.2	-67.24	3.348	-1546.01	7.960	39.8
50	19.059	35.686	5.58	19.050	25.534	34.005	42.111	0.133	0.3	-17.94	0.373	-376.83	3.930	49.7
100	17.863	35.675	5.55	17.846	25.828	34.338	42.480	0.249	1.2	-15.01	-0.641	-248.52	3.191	99.5
125	17.563	35.652	5.41	17.542	25.885	34.405	42.557	0.304	1.8	-10.31	-0.760	-147.41	2.458	124.3
150	17.356	35.643	5.37	17.331	25.929	34.456	42.615	0.357	2.6	-6.31	-0.020	-114.15	2.163	149.2
200	17.089	35.632	5.32	17.056	25.987	34.524	42.691	0.462	4.5	-3.99	-0.265	-58.71	1.551	198.8
250	16.845	35.616	5.36	16.804	26.035	34.580	42.755	0.565	6.8	-5.32	-0.458	-71.45	1.711	248.5
300	16.447	35.564	5.18	16.398	26.091	34.650	42.839	0.667	9.7	-11.86	-1.587	-123.46	2.249	298.2
350	15.648	35.485	4.97	15.593	26.214	34.803	43.018	0.766	13.0	-13.78	-1.083	-182.24	2.733	347.8
400	15.015	35.421	4.93	14.954	26.307	34.919	43.157	0.860	16.5	-14.97	-1.551	-169.49	2.636	397.4
450	14.331	35.362	5.02	14.264	26.412	35.049	43.311	0.949	20.4	-13.03	-0.990	-162.89	2.584	447.0
500	13.775	35.301	5.10	13.702	26.483	35.142	43.424	1.035	24.6	-7.97	-0.896	-79.06	1.809	496.6
600	12.548	35.129	5.10	12.466	26.600	35.308	43.637	1.199	33.8	-12.96	-1.831	-98.02	2.004	595.8
700	11.410	34.973	5.13	11.319	26.697	35.453	43.826	1.355	44.1	-11.47	-1.372	-91.67	1.938	694.8
800	10.010	34.809	4.96	9.914	26.818	35.635	44.065	1.501	55.2	-14.46	-1.592	-111.62	2.139	793.9
900	8.696	34.679	4.77	8.597	26.931	35.807	44.292	1.635	66.9	-15.09	-1.357	-120.91	2.226	892.8
1000	7.246	34.552	4.62	7.146	27.046	35.980	44.538	1.758	78.8	-14.25	-1.099	-111.22	2.135	991.7
1200	5.027	34.437	4.50	4.925	27.238	36.290	44.941	1.970	102.5	-6.69	0.068	-78.76	1.797	1189.4
1400	4.313	34.543	3.92	4.200	27.402	36.490	45.173	2.148	126.0	-4.46	0.386	-71.38	1.710	1386.8
1600	3.456	34.581	3.91	3.334	27.519	36.651	45.377	2.297	148.7	-2.12	0.322	-41.82	1.309	1584.0
1800	3.258	34.673	3.81	3.121	27.613	36.754	45.489	2.427	171.3	-1.56	0.342	-37.18	1.234	1781.0
2000	2.883	34.712	4.02	2.732	27.680	36.842	45.595	2.542	193.6	-1.36	0.190	-26.17	1.036	1977.8
2200	2.694	34.747	4.26	2.528	27.726	36.898	45.661	2.647	216.2	-0.88	0.167	-19.76	0.900	2174.4
2400	2.573	34.775	4.51	2.391	27.759	36.938	45.708	2.746	239.4	-0.59	0.122	-14.01	0.758	2370.9
2600	2.586	34.790	4.73	2.306	27.779	36.962	45.736	2.842	263.7	-0.42	0.057	-8.28	0.582	2567.1
2800	2.437	34.807	4.93	2.219	27.800	36.988	45.766	2.935	289.4	-0.82	0.063	-13.48	0.743	2763.2
3000	2.283	34.811	5.01	2.048	27.816	37.014	45.801	3.026	316.2	-0.92	-0.012	-10.49	0.656	2959.1
3200	2.126	34.807	5.12	1.874	27.827	37.034	45.830	3.114	344.0	-1.34	-0.037	-14.33	0.766	3154.8
3400	1.757	34.787	5.16	1.494	27.840	37.069	45.884	3.198	372.2	-3.02	-0.197	-14.33	0.000	3350.3
3501	1.409	34.763	5.14	1.144	27.845	37.094	45.929	3.237	385.5	-3.43	-0.231	-14.33	0.000	3449.0

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	9.9	19.079	19.877	25.288	33.734	41.817	35.644	35.666	5.31	1.71	0.16	0.00	0.00	2.065	1.199	9	22222222
23	93.0	17.889	17.874	25.825	34.334	42.475	35.678	35.662	5.15	2.91	0.30	2.10	0.00	2.156	1.268	92	22222222
22	195.2	17.080	17.050	25.991	34.528	42.695	35.633		5.22					2.276	1.220	193	25255522
20	393.0	15.128	15.067	26.290	34.898	43.132	35.429	35.444	4.79	4.45	0.61	7.20	0.00	1.963	1.093	389	22222222
19	590.7	12.687	12.606	26.585	35.288	43.612	35.144	35.149	5.04	4.96	0.91	11.20	0.00	1.632	0.952	585	22222222
17	693.2	11.487	11.397	26.688	35.441	43.811	34.978	34.986	5.00	5.65	1.04	13.90	0.00	1.533	0.870	686	22222222
16	791.5	10.297	10.201	26.780	35.584	44.003	34.821	34.849	4.91	8.21	1.22	16.90	0.00	1.126	0.688	783	22222222
15	893.0	8.993	8.950	26.891	35.754	44.227	34.686		4.78	11.28	1.33	18.30	0.00	1.064	0.563	884	25222222
14	992.2	7.436	7.335	27.029	35.983	44.504	34.562	34.570	4.59	20.18	1.79	25.50	0.00	0.803	0.467	982	22222222
13	1090.9	6.185	6.084	27.123	36.118	44.715	34.467	34.478	4.58	27.01	2.03	28.20	0.00	0.784	0.419	1079	22222222
12	1192.4	5.124	5.022	27.230	36.270	44.924	34.440	34.438	4.51	35.21	2.17	30.70	0.00	0.691	0.406	1179	22222222
11	1289.6	4.630	4.523	27.314	36.387	45.050	34.475	34.472	4.18	47.16	2.32	32.50	0.00	0.359	0.194	1275	22222222
10	1492.3	3.768	3.652	27.478	36.594	45.303	34.566	34.546	3.85	81.50	2.45	34.40	0.00	0.139	0.135	1475	22222222
9	1596.2	3.461	3.340	27.519	36.651	45.376	34.579	34.589	3.88	85.42	2.43	34.00	0.00	0.091	0.059	1577	22222222
8	1794.9	3.295	3.157	27.611	36.751	45.484	34.673	34.668	3.89	79.60	2.44	34.30	0.00	0.031	0.033	1773	22222222
7	1995.5	2.930	2.780	27.676	36.835	45.566	34.711	34.708	3.97	79.08	2.30	32.80	0.00	0.032	0.021	1970	22222222
5	2398.8	2.576	2.394	27.760	36.939	45.709	34.774	34.775	4.65	73.60	2.09	30.30	0.00	0.053	0.016	2366	22222222
3	3000.6	2.287	2.052	27.810	37.015	45.801	34.811	34.811	5.00	69.32	1.93	28.20	0.00			2956	22222225
2	3248.9	2.036	1.782	27.833	37.046	45.846	34.804	34.804	5.06	75.63	1.94	28.30	0.00	0.001		3199	22222225
1	3526.2	1.409	1.142	27.847	37.096	45.931	34.763	34.760	5.05	96.96	2.11	30.40	0.00	0.005		3470	22222225

CRUISE: CD 29 STA: 16 DATE (D/M/Y): 17-11-87 TIME: 1214 LAT: 32 41.54 S LONG: 34 10.30 E

GRAVITY= 9.7954 M/S CORIOLIS= -.78773E-04 1/S SOUND SPEED= 1500.5 M/S Depth= 2481 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	1/DB 10-3	(m s)-1 10-12	CPH	METERS
0	20.067	35.676	5.23	20.067	25.261	33.781	41.777	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.067	35.676	5.23	20.067	25.261	33.781	41.777	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.554	35.673	5.22	19.550	25.395	33.850	41.942	0.053	0.1	-5.71	-0.069	-111.10	2.130	19.9
30	19.547	35.674	5.26	19.542	25.398	33.853	41.945	0.079	0.1	-1.30	0.518	-56.84	1.523	29.8
40	19.404	35.691	5.25	19.396	25.449	33.989	42.004	0.104	0.2	-30.56	1.804	-719.48	5.419	39.8
50	19.258	35.698	5.17	19.249	25.492	33.956	42.056	0.130	0.3	-5.89	0.156	-126.96	2.277	49.7
100	18.134	35.667	5.21	18.117	25.755	34.256	42.390	0.249	1.2	-14.52	-0.214	-268.57	3.311	99.5
125	17.854	35.652	5.07	17.833	25.814	34.324	42.467	0.306	1.9	-14.29	-0.794	-232.30	3.079	124.3
150	17.621	35.642	5.05	17.596	25.864	34.382	42.533	0.361	2.7	-9.39	-0.333	-155.61	2.520	149.2
200	17.234	35.634	5.20	17.200	25.954	34.486	42.648	0.468	4.6	-4.48	-0.166	-74.44	1.743	198.8
250	16.968	35.606	5.10	16.926	25.998	34.539	42.710	0.573	7.0	-5.72	-0.511	-76.62	1.769	248.5
300	16.621	35.582	5.03	16.572	26.063	34.616	42.799	0.676	9.9	-12.02	-1.620	-126.14	2.269	298.2
350	15.972	35.509	4.89	15.917	26.159	34.736	42.941	0.776	13.2	-11.59	-0.824	-161.25	2.566	347.8
400	15.438	35.477	4.84	15.376	26.257	34.853	43.076	0.873	16.9	-14.27	-1.418	-169.15	2.628	397.4
450	14.645	35.391	4.84	14.578	26.366	34.992	43.243	0.965	20.9	-14.91	-1.697	-157.35	2.534	447.1
500	14.063	35.334	4.99	13.989	26.448	35.096	43.368	1.052	25.1	-8.34	-0.989	-82.47	1.835	496.6
600	12.950	35.178	4.92	12.867	26.558	35.250	43.564	1.221	34.6	-12.25	-1.666	-99.81	2.018	595.8
700	11.477	34.977	4.99	11.386	26.688	35.441	43.812	1.380	45.1	-15.33	-1.975	-118.53	2.200	694.9
800	10.287	34.837	4.97	10.190	26.793	35.598	44.016	1.528	56.4	-10.84	-1.155	-88.62	1.902	793.9
900	9.125	34.714	4.82	9.023	26.891	35.748	44.215	1.666	68.4	-14.18	-1.393	-111.19	2.130	892.9
1000	7.468	34.563	4.66	7.366	27.023	35.957	44.496	1.793	80.7	-16.04	-1.162	-133.70	2.336	991.8
1200	5.131	34.436	4.47	5.028	27.225	36.273	44.919	2.008	104.8	-8.07	-0.064	-86.83	1.883	1189.4
1400	4.165	34.491	4.08	4.054	27.376	36.472	45.164	2.187	128.4	-4.11	0.418	-69.00	1.678	1386.9
1600	3.468	34.566	3.90	3.346	27.507	36.638	45.363	2.338	151.5	-2.49	0.443	-53.16	1.473	1584.1
1800	3.046	34.662	3.89	2.911	27.624	36.777	45.522	2.467	173.7	-1.81	0.340	-40.02	1.278	1781.1
2000	2.760	34.719	4.16	2.612	27.696	36.864	45.623	2.578	195.3	-1.40	0.344	-35.92	1.211	1977.9
2200	2.585	34.763	4.48	2.421	27.747	36.925	45.693	2.677	216.6	-0.46	0.095	-10.71	0.661	2174.5
2400	2.459	34.789	4.75	2.279	27.780	36.965	45.740	2.772	238.7	-0.68	0.104	-10.71	0.000	2370.9
2461	2.453	34.790	4.76	2.268	27.782	36.968	45.744	2.800	245.6	-0.46	0.063	-10.71	0.000	2430.8

BOTL NO.	PRES DBAR	CTDTP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALTY
24	11.1	19.725	19.723	25.352	33.802	41.888	35.676	35.679	5.35	1.60	0.18	0.10	0.01			11	22222255
23	101.5	18.161	18.143	25.749	34.249	42.382	35.667	35.674	5.16	2.63	0.30	1.80	0.07			100	22222255
22	201.6	17.222	17.189	25.957	34.489	42.651	35.634	35.639	5.27	3.17	0.35	2.50	0.01			199	22222255
21	303.3	16.591	16.542	26.063	34.617	42.801	35.572	35.576	5.00	3.86	0.45	4.50	0.00			300	22222255
20	402.9	15.349	15.287	26.275	34.874	43.100	35.474	35.471	4.87	4.21	0.60	6.80	0.00			399	22222255
19	501.1	13.938	13.865	26.474	35.126	43.402	35.333	35.324	4.97	4.56	0.76	9.10	-0.02			496	22222255
18	603.0	12.744	12.661	26.594	35.295	43.616	35.172	35.153	5.00	5.26	0.91	11.50	-0.02			597	22222255
17	700.2	11.667	11.575	26.651	35.397	43.760	34.975	35.006	4.97	5.97	1.05	14.00	-0.02			693	22222255
16	802.8	10.114	10.068	26.820	35.632	44.058	34.834		4.97	7.88	1.23	16.70	0.00			795	25222255
15	905.3	8.635	8.594	26.967	35.845	44.333	34.713		4.77	12.75	1.49	20.70	-0.01			896	25222255
14	1007.7	7.295	7.194	27.041	35.983	44.530	34.555	34.557	4.65	20.23	1.82	25.70	-0.01			997	22222255
13	1006.3	7.313	7.212	27.039	35.980	44.525	34.555	34.556	4.66	20.24	1.83	25.70	-0.02			996	22222255
12	1105.8	6.080	5.978	27.142	36.142	44.744	34.476	34.481	4.56	28.25	2.04	28.70	-0.01			1094	22222255
11	1105.1	6.086	5.984	27.141	36.141	44.742	34.476	34.476	4.57	28.09	2.05	28.70	-0.01			1093	22222255
10	1206.8	5.092	4.989	27.230	36.280	44.927	34.437	34.438	4.50	36.46	2.22	30.90	-0.02			1194	22222255
8	1406.9	4.119	4.007	27.381	36.480	45.174	34.492	34.497	4.08	55.14	2.41	33.60	-0.01			1391	22222255
7	1506.1	3.685	3.569	27.465	36.585	45.299	34.541	34.541	3.91	64.06	2.47	34.30	-0.01			1489	22222255
6	1609.1	3.370	3.248	27.522	36.659	45.388	34.574	34.591	3.80	70.19	2.46	34.20	0.00			1590	22222255
5	1706.5	3.206	3.078	27.575	36.720	45.458	34.621	34.633	3.85	74.95	2.44	34.10	-0.01			1686	22222255
4	1808.0	2.992	2.858	27.631	36.787	45.534	34.665	34.672	3.93	77.26	2.39	33.40	-0.01			1786	22222255
3	2003.3	2.744	2.596	27.697	36.866	45.626	34.719	34.727	4.23	75.73	2.26	31.70	0.02			1978	22222255
2	2257.0	2.569	2.400	27.752	36.931	45.700	34.767	34.772	4.52	73.50	2.14	30.20	-0.01			2227	22222255
1	2457.7	2.453	2.267	27.782	36.968	45.743	34.790	34.790	4.78	69.69	2.05	28.90	-0.02			2424	22222255

CRUISE: CD 29 STA: 17 DATE (D/M/Y): 17-11-87 TIME: 1849 LAT: 32 53.96 S LONG: 35 0.12 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79216E-04 1/S SOUND SPEED= 1582.9 M/S Depth= 1593 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	20.096	35.610	5.49	20.096	25.203	33.643	41.720	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.096	35.610	5.49	20.095	25.203	33.643	41.720	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.967	35.633	5.24	19.963	25.256	33.699	41.779	0.055	0.1	-2.74	-0.017	-55.29	1.498	19.9
30	19.945	35.631	5.22	19.939	25.261	33.705	41.786	0.082	0.1	-3.27	-0.200	-50.51	1.432	29.9
40	19.879	35.627	5.24	19.871	25.276	33.722	41.805	0.109	0.2	-15.71	-0.552	-288.91	3.425	39.8
50	19.421	35.603	5.08	19.411	25.377	33.838	41.934	0.136	0.3	-76.23	-0.476	-1508.04	7.824	49.7
100	18.188	35.659	4.92	18.171	25.736	34.235	42.367	0.255	1.3	-12.38	0.093	-246.00	3.160	99.5
125	17.886	35.655	4.96	17.865	25.808	34.310	42.459	0.311	1.9	-11.96	-0.840	-179.19	2.697	124.3
150	17.540	35.620	4.94	17.514	25.867	34.389	42.542	0.366	2.7	-6.92	0.338	-158.45	2.536	149.2
200	17.198	35.616	4.96	17.164	25.949	34.482	42.645	0.474	4.6	-9.72	-0.715	-141.16	2.394	198.9
250	16.809	35.592	4.99	16.768	26.025	34.572	42.748	0.570	7.0	-5.59	-0.009	-104.02	2.055	248.5
300	16.318	35.540	4.88	16.269	26.102	34.666	42.859	0.680	9.8	-11.03	-1.106	-137.32	2.361	298.2
350	15.782	35.488	4.85	15.727	26.186	34.770	42.981	0.779	13.1	-13.36	-1.362	-160.33	2.551	347.8
400	15.177	35.449	4.89	15.115	26.293	34.899	43.131	0.873	16.7	-11.73	-0.725	-164.54	2.584	397.4
450	14.555	35.384	4.89	14.487	26.380	35.010	43.264	0.964	20.7	-11.00	-1.232	-117.25	2.182	447.1
500	13.882	35.305	4.92	13.810	26.464	35.119	43.398	1.052	24.9	-13.48	-1.526	-136.92	2.358	496.6
600	12.655	35.141	4.86	12.572	26.588	35.292	43.617	1.217	34.2	-11.81	-1.585	-96.22	1.976	595.8
700	11.410	34.978	4.99	11.320	26.701	35.457	43.830	1.374	44.6	-13.22	-1.654	-105.11	2.066	694.9
800	10.211	34.833	4.94	10.115	26.802	35.610	44.032	1.521	55.8	-13.57	-1.529	-105.40	2.069	793.9
900	8.863	34.687	4.81	8.763	26.911	35.780	44.258	1.657	67.6	-15.12	-1.390	-121.64	2.222	892.9
1000	7.162	34.540	4.69	7.063	27.048	35.996	44.548	1.781	79.6	-16.10	-1.279	-123.91	2.243	991.8
1200	4.934	34.426	4.53	4.833	27.239	36.297	44.952	1.993	103.3	-7.13	0.110	-86.37	1.872	1189.4
1400	4.123	34.498	4.08	4.012	27.386	36.484	45.177	2.169	126.6	-3.98	0.505	-72.70	1.718	1386.8
1600	3.465	34.584	3.88	3.343	27.521	36.653	45.377	2.316	149.0	-0.83	0.155	-72.70	0.000	1584.0
1615	3.465	34.585	3.84	3.342	27.522	36.653	45.378	2.326	150.7	-0.79	0.150	-72.70	0.000	1598.8

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
12	11.9	20.037	20.035	25.238	33.679	41.757	35.635	35.638	5.29	1.77		0.00	0.00			11	222252255
11	105.2	18.037	18.019	25.775	34.279	42.416	35.661	35.666	5.19	2.97		1.80	0.00			104	222252255
9	302.8	16.254	16.205	26.114	34.680	42.875	35.536	35.536	4.78	4.18		5.50	0.00			300	222252255
8	401.8	15.164	15.102	26.296	34.902	43.134	35.448	35.450	4.83	4.35		7.10	0.00			398	222252255
7	598.8	12.545	12.463	26.610	35.319	43.647	35.142	35.133	4.93	5.56		11.80	0.00			593	222252255
6	797.9	10.044	9.998	26.834	35.649	44.077	34.837		4.90	8.47		17.00	0.00			790	252252255
5	1001.0	6.908	6.811	27.083	36.043	44.607	34.541	34.523	4.64	21.82		26.30	0.00			990	222252255
4	1099.2	5.021	5.722	27.153	36.166	44.780	34.450	34.446	4.68	26.97		28.60	0.00			1087	222252255
3	1198.5	5.041	4.939	27.227	36.279	44.930	34.426	34.435	4.55	35.53		30.50	0.00	0.621		1185	222252225
2	1399.9	4.147	4.036	27.382	36.479	45.171	34.497	34.500	4.08	54.54		33.00	0.00	0.228	0.146	1384	222252222

CRUISE: CD 29 STA: 18 DATE (D/M/Y): 17-11-87 TIME: 2330 LAT: 33 0.14 S LONG: 35 35.04 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79436E-04 1/S SOUND SPEED= 1503.3 M/S Depth= 1474 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.787	35.673	5.09	19.787	25.333	33.781	41.865	0.008	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.787	35.673	5.09	19.787	25.333	33.781	41.866	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.796	35.660	5.17	19.792	25.321	33.770	41.854	0.053	0.1	-4.60	-0.211	-81.69	1.818	19.9
30	19.341	35.657	5.26	19.335	25.439	33.901	41.999	0.079	0.1	-125.95	2.028	-2652.28	10.362	29.8
40	18.479	35.665	5.45	18.472	25.665	34.154	42.278	0.103	0.2	-33.81	0.419	-687.83	5.277	39.8
50	18.084	35.664	5.20	18.075	25.763	34.265	42.401	0.126	0.3	-19.99	-0.792	-340.17	3.711	49.7
100	17.714	35.650	5.19	17.697	25.846	34.360	42.507	0.236	1.2	-8.02	-0.378	-131.02	2.303	99.5
125	17.470	35.637	5.08	17.449	25.896	34.419	42.574	0.290	1.8	-8.10	-0.438	-125.38	2.253	124.3
150	17.340	35.634	5.16	17.314	25.926	34.454	42.613	0.343	2.5	-4.84	-0.474	-55.51	1.499	149.1
200	16.965	35.599	5.02	16.932	25.991	34.532	42.704	0.448	4.4	-8.19	-0.976	-95.46	1.966	198.8
250	16.462	35.550	4.82	16.421	26.074	34.633	42.821	0.551	6.7	-12.08	-0.891	-169.68	2.621	248.5
300	15.879	35.502	4.82	15.831	26.173	34.753	42.961	0.649	9.5	-12.14	-0.950	-163.30	2.571	298.1
350	15.183	35.441	4.86	15.130	26.284	34.890	43.121	0.744	12.6	-15.20	-1.592	-174.03	2.654	347.8
400	14.571	35.381	4.86	14.511	26.373	35.001	43.255	0.834	16.1	-11.85	-1.111	-138.61	2.369	397.4
450	14.013	35.335	5.03	13.947	26.458	35.108	43.381	0.921	19.8	-9.60	-0.724	-120.15	2.205	447.0
500	13.514	35.263	5.06	13.442	26.507	35.177	43.469	1.005	23.9	-10.73	-1.703	-76.84	1.764	496.6
600	12.060	35.064	4.99	11.980	26.643	35.372	43.719	1.166	32.9	-12.24	-1.557	-99.82	2.010	595.7
700	10.925	34.916	4.95	10.837	26.740	35.517	43.909	1.316	42.9	-10.47	-1.238	-83.64	1.840	694.8
800	10.128	34.825	4.93	10.032	26.810	35.622	44.047	1.460	53.9	-11.45	-1.312	-85.48	1.860	793.8
900	8.724	34.678	4.80	8.624	26.925	35.800	44.284	1.596	65.6	-10.14	-0.931	-81.88	1.821	892.8
1000	7.320	34.552	4.65	7.220	27.036	35.976	44.521	1.721	77.8	-16.21	-1.334	-125.75	2.256	991.7
1200	4.887	34.410	4.60	4.786	27.232	36.292	44.949	1.934	101.6	-7.14	0.073	-84.36	1.848	1189.4
1400	4.024	34.503	4.01	3.914	27.400	36.503	45.201	2.111	125.1	-3.55	0.541	-84.36	0.000	1386.8
1469	3.860	34.537	3.90	3.746	27.444	36.555	45.261	2.165	133.0	-2.66	0.512	-84.36	0.000	1454.8

BOTL	PRES	CTDMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALTY
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	12.5	19.838	19.836	25.310	33.757	41.840	35.660	35.665	5.33	1.47	0.13	0.20	0.00			12	222222255
23	203.9	16.716	16.683	26.048	34.597	42.777	35.596	35.573	4.87	3.67	0.42	5.00	0.01			202	222222255
22	301.2	15.695	15.648	26.214	34.800	43.013	35.500	35.490	4.83	4.01	0.52	6.50	0.00			298	222222255
21	403.0	14.477	14.417	26.391	35.023	43.279	35.378	35.377	4.91	4.19	0.60	8.30	0.00			399	222222255
20	502.0	13.573	13.501	26.495	35.162	43.452	35.263	35.274	5.05	4.19	0.69	9.50	0.00			497	222222255
19	602.4	12.189	12.108	26.615	35.339	43.681	35.059	35.088	4.97	5.38	0.88	12.70	0.01			596	222222255
18	701.6	11.026	10.937	26.720	35.493	43.881	34.913	34.930	4.98	6.91	1.06	15.30	0.00			695	222222255
16	1001.4	7.254	7.221	27.042	35.986	44.534	34.549		4.67	19.45	1.74	25.60	0.00			991	252222255
15	1251.5	4.636	4.533	27.276	36.348	45.018	34.430	34.434	4.48	40.48	2.17	31.70	-0.01	0.403	0.242	1238	222222222
14	1350.7	4.153	4.045	27.364	36.461	45.153	34.475	34.486	4.13	52.69	2.32	33.40	0.00	0.251	0.197	1336	222222222
13	1469.9	3.850	3.735	27.444	36.556	45.262	34.536	34.541	3.93	61.84	2.38	34.10	0.00	0.144		1453	222222225

CRUISE: CD 29 STA: 19 DATE (D/M/Y): 18-11-87 TIME: 0340 LAT: 32 59.37 S LONG: 36 4.75 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79489E-04 1/S SOUND SPEED= 1499.7 M/S Depth= 2006 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	θ-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
0	19.688	35.687	5.24	19.688	25.370	33.821	41.908	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
3	19.688	35.687	5.24	19.687	25.370	33.821	41.908	0.008	0.0	-0.37	0.000	0.00	0.000	3.0
20	19.587	35.680	5.29	19.583	25.392	33.846	41.936	0.052	0.1	-5.93	0.149	-129.37	2.289	19.9
30	19.521	35.683	5.35	19.515	25.412	33.868	41.960	0.078	0.1	-10.45	0.159	-221.42	2.994	29.0
40	19.330	35.687	5.39	19.323	25.464	33.927	42.025	0.103	0.2	-16.61	0.124	-342.62	3.725	39.0
50	19.115	35.681	5.40	19.106	25.515	33.985	42.089	0.128	0.3	-22.39	-2.004	-1523.79	7.855	49.7
100	17.579	35.644	5.20	17.562	25.874	34.393	42.544	0.241	1.2	-12.56	-0.519	-209.32	2.911	99.5
125	17.372	35.638	5.21	17.351	25.921	34.447	42.605	0.294	1.8	-7.78	-0.387	-125.00	2.257	124.3
150	17.227	35.630	5.14	17.202	25.950	34.482	42.644	0.347	2.5	-4.82	-0.113	-80.17	1.802	149.2
200	16.894	35.597	5.03	16.861	26.007	34.550	42.724	0.450	4.4	-6.80	-0.926	-71.89	1.706	198.8
250	16.438	35.552	4.87	16.397	26.081	34.641	42.830	0.552	6.7	-13.32	-1.040	-183.15	2.723	248.5
300	15.780	35.495	4.89	15.740	26.188	34.771	42.982	0.650	9.5	-12.39	-1.094	-158.53	2.534	298.1
350	15.092	35.433	4.89	15.038	26.299	34.907	43.142	0.744	12.6	-18.02	-1.817	-208.74	2.907	347.8
400	14.387	35.358	4.87	14.328	26.395	35.031	43.290	0.833	16.0	-11.64	-1.223	-126.37	2.262	397.4
450	13.711	35.288	5.04	13.646	26.485	35.147	43.431	0.918	19.7	-10.72	-1.091	-114.63	2.154	447.0
500	13.160	35.210	5.02	13.090	26.538	35.222	43.527	1.001	23.7	-12.73	-1.820	-99.97	2.012	496.6
600	11.940	35.046	5.03	11.860	26.652	35.386	43.733	1.160	32.6	-11.78	-1.556	-91.11	1.921	595.7
700	10.964	34.918	5.04	10.876	26.735	35.510	43.901	1.310	42.5	-9.46	-1.155	-72.00	1.717	694.8
800	9.947	34.801	4.98	9.852	26.822	35.642	44.074	1.453	53.5	-11.49	-1.232	-98.59	1.915	793.8
900	8.716	34.679	4.78	8.616	26.928	35.803	44.287	1.588	65.2	-12.31	-1.138	-97.66	1.989	892.8
1000	7.091	34.547	4.61	6.992	27.064	36.015	44.570	1.712	77.1	-17.13	-1.199	-142.86	2.405	991.7
1200	4.845	34.409	4.62	4.745	27.236	36.298	44.958	1.921	100.6	-7.52	0.034	-85.73	1.863	1189.3
1400	3.809	34.485	4.15	3.780	27.399	36.509	45.214	2.096	123.7	-3.31	0.556	-69.54	1.678	1386.8
1600	3.224	34.563	4.00	3.105	27.527	36.671	45.408	2.243	146.1	-3.42	0.378	-59.05	1.546	1584.0
1800	2.911	34.665	4.04	2.779	27.638	36.798	45.549	2.366	167.5	-1.82	0.273	-36.07	1.209	1781.0
2000	2.670	34.745	4.37	2.523	27.724	36.897	45.660	2.475	188.5	-1.87	0.518	-36.07	0.000	1977.8
2011	2.667	34.746	4.34	2.519	27.725	36.898	45.662	2.480	189.6	-2.02	0.562	-36.07	0.000	1988.6

BOTL NO.	PRES DBAR	CTD IPTS68	TMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
20	12.6	19.615	19.613	25.388	33.842	41.931	35.686	35.683	5.35	1.39	0.08	0.00	0.00	0.00	1.021	0.000	12	22222222
19	101.6	17.583	17.566	25.872	34.391	42.543	35.643	35.643	5.12	3.08	0.26	2.60	0.04	0.04			100	22222225
18	206.1	16.812	16.778	26.023	34.569	42.745	35.593	35.588	4.98	3.60	0.38	4.20	0.03	0.03			204	22222225
17	302.9	15.753	15.705	26.192	34.776	42.988	35.489	35.499	4.81	3.94	0.52	6.20	0.01	0.01			300	22222225
16	400.7	14.435	14.376	26.385	35.018	43.276	35.358	35.364	4.65	4.45	0.63	8.20	0.01	0.01			397	22222225
15	500.4	13.439	13.368	26.480	35.153	43.448	35.208	35.258	5.00	4.46	0.71	9.50	0.02	0.02			495	22222225
14	600.9	12.245	12.165	26.592	35.314	43.655	35.044	35.085	4.98	5.31	0.90	12.40	0.02	0.02	1.188	0.731	595	22222222
13	698.4	10.997	10.909	26.729	35.503	43.893	34.919	34.922	4.97	6.83	1.06	15.10	0.00	0.00	1.279	0.727	691	22222222
12	798.9	9.795	9.701	26.848	35.675	44.113	34.802	34.786	4.86	8.87	1.23	18.20	0.01	0.01	0.970	0.561	791	22222222
11	899.2	8.545	8.446	26.956	35.838	44.330	34.601	34.661	4.71	13.97	1.50	22.10	0.01	0.01	0.618	0.417	890	22222222
10	1000.0	6.921	6.824	27.089	36.048	44.610	34.550	34.536	4.59	22.45	1.83	26.70	0.00	0.00	0.618	0.408	989	22222222
9	1100.9	5.734	5.635	27.165	36.183	44.800	34.452	34.450	4.61	29.06	2.04	29.00	0.00	0.00	0.646	0.391	1089	22222222
8	1199.8	4.771	4.672	27.245	36.311	44.974	34.410	34.411	4.59	36.01	2.25	31.10	0.01	0.01	0.637	0.364	1187	22222222
7	1299.1	4.302	4.198	27.328	36.417	45.102	34.450	34.453	4.28	47.20	2.28	32.50	0.00	0.00	0.344	0.186	1285	22222222
6	1399.0	3.850	3.742	27.402	36.514	45.221	34.484	34.493	4.08	56.36	2.40	33.00	0.00	0.00	0.206	0.146	1383	22222222
5	1499.4	3.634	3.519	27.470	36.593	45.309	34.541	34.550	3.89	64.33	2.43	34.30	0.00	0.00	0.118	0.097	1482	22222222
4	1600.4	3.181	3.062	27.531	36.678	45.417	34.564	34.571	3.96	67.89	2.42	34.60	-0.01	0.091	0.061	0.061	1582	22222222
3	1700.7	3.123	2.997	27.598	36.747	45.488	34.640	34.648	3.88	75.19	2.38	34.10	0.00	0.082	0.023	0.023	1680	22222222
2	1800.0	2.905	2.773	27.638	36.799	45.551	34.665	34.668	4.02	74.51	2.31	33.40	-0.01	0.009			1778	22222225
1	2007.6	2.668	2.520	27.725	36.898	45.661	34.746	34.758	4.34	70.96	2.08	30.60	0.00	0.035			1982	22222225

CRUISE: CD 29 STA: 20 DATE (D/M/Y): 18-11-87 TIME: 0656 LAT: 33 0.87 S LONG: 36 20.65 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79462E-04 1/S SOUND SPEED= 1499.6 M/S Depth= 2591 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.122	35.643	5.00	20.122	25.221	33.659	41.735	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.122	35.643	5.00	20.122	25.221	33.659	41.735	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.850	35.663	5.33	19.846	25.310	33.756	41.839	0.054	0.1	-0.96	0.741	-227.69	3.036	19.9
30	19.684	35.676	5.33	19.679	25.363	33.815	41.903	0.080	0.1	-35.90	1.764	-836.44	5.818	29.8
40	19.174	35.678	5.41	19.167	25.498	33.965	42.068	0.106	0.2	-103.69	-1.779	-1968.06	8.924	39.8
50	18.429	35.662	5.52	18.420	25.676	34.167	42.292	0.130	0.3	-42.66	-1.900	-721.95	5.405	49.7
100	17.315	35.636	5.11	17.299	25.932	34.460	42.620	0.238	1.1	-9.40	-0.258	-162.72	2.566	99.5
125	17.156	35.628	5.04	17.136	25.965	34.498	42.663	0.290	1.7	-5.92	-0.368	-87.43	1.881	124.3
150	17.061	35.628	5.17	17.036	25.989	34.526	42.694	0.342	2.5	-3.61	-0.180	-56.17	1.508	149.1
200	16.839	35.616	5.27	16.806	26.034	34.579	42.754	0.444	4.3	-7.04	-0.847	-80.78	1.808	198.8
250	16.262	35.554	5.05	16.222	26.123	34.689	42.883	0.545	6.6	-14.17	-1.095	-194.27	2.804	248.5
300	15.546	35.489	4.99	15.499	26.239	34.830	43.049	0.641	9.3	-12.46	-1.204	-151.44	2.476	298.1
350	15.071	35.446	4.96	15.018	26.313	34.922	43.157	0.733	12.3	-9.02	-0.745	-114.34	2.151	347.8
400	14.547	35.403	5.04	14.487	26.395	35.024	43.278	0.822	15.7	-10.38	-0.927	-124.11	2.241	397.4
450	13.940	35.317	4.91	13.875	26.459	35.112	43.388	0.908	19.5	-12.64	-1.763	-108.38	2.094	447.0
500	13.422	35.252	4.99	13.351	26.517	35.190	43.486	0.991	23.5	-10.72	-1.574	-83.84	1.842	496.6
600	12.376	35.104	5.07	12.295	26.613	35.329	43.664	1.153	32.6	-9.74	-1.321	-76.53	1.768	595.7
700	11.288	34.966	5.07	11.198	26.713	35.475	43.853	1.307	42.8	-13.05	-1.668	-99.32	2.005	694.8
800	10.140	34.819	4.89	10.043	26.804	35.615	44.040	1.453	53.9	-12.70	-1.366	-100.83	2.020	793.8
900	8.695	34.674	4.78	8.596	26.927	35.803	44.289	1.588	65.7	-13.58	-1.222	-109.44	2.105	892.8
1000	7.229	34.555	4.60	7.129	27.051	35.995	44.545	1.712	77.6	-15.25	-1.197	-119.43	2.198	991.7
1200	4.907	34.423	4.52	4.806	27.240	36.299	44.956	1.924	101.4	-8.43	-0.084	-89.23	1.908	1189.3
1400	3.880	34.478	4.17	3.772	27.394	36.505	45.210	2.100	124.6	-3.89	0.411	-66.36	1.639	1386.8
1600	3.395	34.589	3.89	3.274	27.532	36.667	45.395	2.246	147.0	-2.56	0.425	-52.93	1.463	1584.0
1800	2.875	34.661	4.11	2.743	27.638	36.800	45.553	2.370	168.5	-1.43	0.409	-40.15	1.275	1781.0
2000	2.688	34.732	4.31	2.541	27.712	36.884	45.647	2.478	189.2	-1.02	0.200	-23.24	0.970	1977.6
2200	2.574	34.767	4.51	2.411	27.751	36.929	45.698	2.576	210.3	-0.62	0.142	-15.53	0.793	2174.4
2400	2.456	34.792	4.75	2.276	27.782	36.968	45.743	2.669	232.1	-0.76	0.116	-15.65	0.796	2370.8
2600	2.357	34.805	4.93	2.160	27.803	36.994	45.775	2.758	254.7	-0.34	0.006	-15.65	0.000	2567.0
2603	2.356	34.805	4.93	2.159	27.803	36.994	45.775	2.759	255.1	-0.32	0.005	-15.65	0.000	2570.0

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALTY
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
23	13.7	19.961	19.959	25.277	33.721	41.801	35.660	35.661	5.33	1.48	0.16	0.00	0.01			13	222222255
22	88.5	17.339	17.324	25.934	34.461	42.620	35.647	35.641	5.28	2.68	0.32	1.70	0.05			87	222222255
21	303.8	15.491	15.444	26.249	34.842	43.063	35.486	35.486	4.97	3.88	0.54	5.80	0.01			301	222222255
20	402.0	14.488	14.428	26.408	35.039	43.295	35.403	35.402	4.99	3.89	0.59	6.90	0.00			398	222222255
19	503.6	13.357	13.286	26.525	35.201	43.499	35.245	35.247	4.99	4.75	0.73	9.60	0.01			499	222222255
18	603.5	12.293	12.212	26.627	35.346	43.684	35.100	35.092	5.07	5.10	0.89	11.80	0.00			598	222222255
17	703.7	11.177	11.087	26.730	35.496	43.878	34.961	34.951	5.06	5.80	1.07	14.20	0.00			697	222222255
16	801.6	9.916	9.821	26.841	35.662	44.095	34.818	34.802	4.97	8.19	1.29	17.50	-0.01			793	222222255
15	896.7	8.565	8.467	26.950	35.832	44.323	34.678	34.666	4.76	13.46	1.53	21.70	0.00			887	222222255
14	999.7	7.185	7.086	27.057	36.004	44.555	34.556	34.553	4.60	21.28	1.81	25.60	0.01			989	222222255
13	1100.5	5.911	5.812	27.140	36.149	44.759	34.448	34.451	4.69	26.90	2.01	28.30	0.00			1089	222222255
12	1199.6	4.862	4.761	27.245	36.306	44.965	34.423	34.421	4.56	36.40	2.18	30.70	0.00			1186	222222255
11	1299.9	4.295	4.191	27.322	36.411	45.097	34.441	34.442	4.35	46.09	2.28	32.20	0.01			1285	222222255
10	1397.4	3.857	3.749	27.394	36.506	45.213	34.475	34.481	4.13	55.09	2.40	33.50	0.01			1382	222222255
9	1500.3	3.547	3.433	27.467	36.595	45.316	34.527	34.528	3.96	62.91	2.43	34.00	0.01			1483	222222255
8	1601.6	3.387	3.266	27.533	36.689	45.397	34.590	34.591	3.84	70.38	2.40	34.10	0.00			1583	222222255
7	1702.3	3.086	2.960	27.588	36.739	45.482	34.623	34.626	3.93	72.25	2.37	33.60	0.00			1682	222222255
5	1899.5	2.820	2.680	27.680	36.845	45.601	34.707	34.707	4.09	77.03	2.26	32.10	0.01			1876	222222255
4	2002.2	2.695	2.548	27.712	36.883	45.645	34.732	34.734	4.32	73.98	2.16	31.00	0.00			1977	222222255
3	2200.2	2.576	2.412	27.751	36.929	45.698	34.767	34.768	4.55	72.12	2.06	29.70	0.01			2171	222222255
2	2366.3	2.473	2.296	27.779	36.963	45.737	34.789	34.791	4.77	69.75	1.97	28.70	-0.01			2334	222222255
1	2599.4	2.356	2.159	27.803	36.994	45.775	34.805	34.811	4.92	67.22	1.87	27.60	0.01			2563	222222255

CRUISE: CD 29 STA: 21 DATE (D/M/Y): 18-11-87 TIME: 1829 LAT: 33 0.69 S LONG: 36 30.87 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79456E-04 1/S SOUND SPEED= 1501.4 M/S Depth= 3304 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.923	35.695	4.86	19.923	25.314	33.758	41.838	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.923	35.695	4.86	19.922	25.314	33.758	41.838	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.260	35.700	5.45	19.257	25.491	33.955	42.055	0.051	0.1	-18.38	0.170	-379.94	3.921	19.9
30	19.092	35.701	5.47	19.087	25.536	34.006	42.111	0.076	0.1	-12.18	0.132	-251.83	3.192	29.8
40	18.917	35.704	5.52	18.910	25.583	34.059	42.168	0.100	0.2	-26.07	-0.621	-482.00	4.417	39.8
50	18.324	35.670	5.58	18.315	25.788	34.203	42.331	0.124	0.3	-92.16	-4.453	-1533.61	7.678	49.7
100	17.216	35.635	5.19	17.199	25.955	34.487	42.649	0.231	1.1	-8.74	-0.454	-137.93	2.563	99.4
125	17.081	35.631	5.27	17.060	25.985	34.521	42.688	0.283	1.7	-4.63	-0.191	-75.79	1.751	124.3
150	16.999	35.627	5.23	16.974	26.003	34.542	42.711	0.334	2.4	-2.63	-0.140	-41.32	1.293	149.1
200	16.853	35.619	5.32	16.820	26.033	34.577	42.752	0.436	4.3	-6.67	-0.681	-83.86	1.842	198.8
250	16.301	35.558	5.00	16.261	26.117	34.681	42.875	0.537	6.6	-11.42	-0.953	-152.97	2.488	248.5
300	15.779	35.509	4.90	15.732	26.202	34.785	42.996	0.633	9.3	-12.73	-1.204	-157.53	2.525	298.1
350	15.141	35.451	4.96	15.087	26.302	34.908	43.141	0.727	12.4	-14.59	-1.559	-164.05	2.577	347.8
400	14.427	35.377	4.90	14.367	26.401	35.034	43.293	0.816	15.8	-9.64	-0.776	-119.82	2.202	397.4
450	14.028	35.338	5.07	13.962	26.457	35.106	43.379	0.902	19.5	-10.71	-1.415	-97.28	1.984	447.0
500	13.461	35.259	5.05	13.390	26.515	35.187	43.480	0.986	23.6	-11.66	-1.623	-96.99	1.981	496.6
600	12.335	35.098	5.07	12.254	26.617	35.335	43.671	1.147	32.6	-10.82	-1.437	-86.23	1.868	595.7
700	11.304	34.963	5.08	11.214	26.709	35.469	43.847	1.301	42.8	-9.54	-1.221	-71.70	1.703	694.8
800	10.192	34.828	5.00	10.095	26.802	35.611	44.033	1.447	54.0	-12.34	-1.409	-95.20	1.963	793.8
900	8.747	34.679	4.87	8.648	26.923	35.796	44.279	1.584	65.8	-15.77	-1.454	-128.69	2.282	892.8
1000	7.453	34.573	4.65	7.352	27.034	35.967	44.507	1.709	77.9	-14.68	-1.251	-110.29	2.113	991.7
1200	5.044	34.444	4.43	4.942	27.241	36.293	44.943	1.923	101.8	-8.35	-0.102	-88.03	1.887	1189.3
1400	3.932	34.476	4.17	3.823	27.388	36.496	45.199	2.100	125.3	-4.72	0.329	-70.25	1.686	1386.8
1600	3.224	34.553	4.03	3.105	27.519	36.663	45.400	2.248	148.0	-2.47	0.466	-54.21	1.481	1584.0
1800	2.871	34.642	4.09	2.739	27.623	36.786	45.540	2.374	169.7	-0.81	0.435	-35.18	1.193	1781.0
2000	2.734	34.721	4.30	2.586	27.699	36.869	45.629	2.484	191.1	-0.93	0.335	-30.58	1.112	1977.8
2200	2.632	34.768	4.56	2.468	27.748	36.923	45.689	2.584	212.5	-0.75	0.126	-15.95	0.803	2174.4
2400	2.484	34.784	4.64	2.304	27.774	36.958	45.732	2.679	234.7	-0.67	0.116	-14.66	0.770	2370.8
2600	2.404	34.801	4.85	2.206	27.796	36.985	45.763	2.770	257.8	-0.52	0.049	-9.03	0.604	2567.0
2800	2.294	34.807	4.96	2.079	27.811	37.007	45.792	2.858	282.3	-0.60	0.006	-7.48	0.550	2763.1
3000	2.194	34.806	5.00	1.961	27.819	37.021	45.813	2.946	308.2	-0.48	0.007	-6.33	0.506	2959.0
3200	2.078	34.802	5.05	1.828	27.827	37.037	45.835	3.033	335.6	-0.93	-0.045	-8.82	0.597	3154.7
3315	1.973	34.796	5.05	1.713	27.830	37.046	45.851	3.082	352.0	-1.08	-0.063	-8.82	0.000	3267.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	16.3	19.468	19.465	25.437	33.895	41.988	35.699	35.706	5.38	1.32	0.22	0.10	0.01	1.951	1.159	16	222222222
23	152.0	16.999	16.974	26.003	34.542	42.712	35.627	35.626	5.30	2.86	0.36	2.60	0.02	2.060	1.252	150	222222222
22	301.3	15.783	15.736	26.199	34.782	42.993	35.507	35.509	4.98	3.74	0.54	5.50	0.05			298	222222255
21	401.8	15.597	14.537	26.368	34.995	43.248	35.381	35.384	4.94	4.09	0.68	7.40	0.01	1.924	1.045	398	222222222
20	501.7	13.582	13.510	26.487	35.154	43.444	35.255	35.279	5.09	4.27	0.78	8.90	0.00	1.740	0.725	497	222222222
19	600.5	12.405	12.323	26.603	35.318	43.652	35.098	35.106	5.04	4.97	0.96	11.70	0.01			595	222222255
18	701.7	11.277	11.187	26.712	35.474	43.853	34.962	34.959	5.04	5.84	1.13	14.20	0.01	1.226	0.548	695	222222222
17	800.6	10.070	9.974	26.822	35.636	44.063	34.827	34.813	4.96	7.74	1.32	17.20	0.00			792	222222255
16	900.4	8.690	8.590	26.930	35.806	44.291	34.676	34.681	4.80	12.54	1.58	21.10	0.00			891	222222255
15	998.0	7.499	7.463	27.028	35.959	44.497	34.574		4.67							987	252555555
14	1200.7	5.060	4.958	27.239	36.290	44.939	34.444	34.445	4.44	37.53	2.27	30.80	0.00	0.441	0.233	1188	222222222
13	1402.4	3.956	3.846	27.386	36.493	45.195	34.477	34.477	4.17	53.80	2.46	33.40	0.00			1386	222222255
12	1599.4	3.218	3.100	27.519	36.664	45.401	34.553	34.552	4.00	66.65	2.52	34.20	-0.01	0.107	0.055	1581	222222222
11	1801.0	2.865	2.864	27.623	36.786	45.541	34.642		4.10	71.46	2.43	32.80	0.00			1779	252222255
10	1999.1	2.734	2.586	27.699	36.868	45.629	34.720	34.721	4.31	72.50	2.30	31.20	0.00			1974	222222255
9	2202.0	2.615	2.451	27.749	36.926	45.692	34.769	34.765	4.57	69.45	2.17	29.70	0.00			2173	222222255
8	2402.3	2.499	2.318	27.774	36.957	45.730	34.785	34.782	4.63	72.38	2.15	29.30	0.00			2370	222222255
7	2602.0	2.409	2.211	27.795	36.984	45.762	34.801	34.801	4.87	69.16	2.08	28.20	0.00			2566	222222255
6	2802.0	2.293	2.077	27.811	37.007	45.792	34.807	34.805	4.96	65.07	2.02	27.30	0.00			2762	222222255
5	2903.9	2.243	2.019	27.816	37.015	45.803	34.807	34.806	5.01	71.09	2.07	27.90	-0.01			2861	222222255
4	3003.0	2.204	1.971	27.819	37.020	45.811	34.806	34.808	5.02	71.28	2.05	27.70	0.00			2958	222222255
3	3104.6	2.146	1.904	27.824	37.029	45.824	34.806	34.805	5.06	72.50	2.03	27.70	0.00			3058	222222255
2	3205.6	2.080	1.829	27.827	37.036	45.834	34.802	34.802	5.06	74.75	2.04	27.80	-0.01			3157	222222255
1	3316.2	1.967	1.708	27.830	37.047	45.851	34.795	34.793	5.01					0.000	0.000	3265	222555522

CRUISE: CD 29 STA: 22 DATE (D/M/Y): 18-11-87 TIME: 1416 LAT: 33 0.32 S LONG: 36 40.49 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79443E-04 1/S SOUND SPEED= 1507.9 M/S Depth= 4744 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m/s)-1 10-12	B-V CPH	DEPTH METERS
0	19.873	35.708	5.26	19.873	25.337	33.782	41.864	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.873	35.708	5.26	19.873	25.337	33.782	41.864	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.573	35.701	5.22	19.569	25.411	33.865	41.956	0.052	0.1	-4.39	-0.066	-85.43	1.860	19.9
30	19.530	35.699	5.32	19.525	25.421	33.877	41.969	0.078	0.1	-8.37	-0.408	-145.59	2.428	29.8
40	19.213	35.690	5.41	19.206	25.497	33.963	42.064	0.103	0.2	-48.18	-0.934	-752.62	5.520	39.8
50	18.781	35.679	5.40	18.772	25.600	34.079	42.194	0.127	0.3	-48.56	-1.757	-857.84	5.893	49.7
100	17.459	35.652	5.37	17.442	25.910	34.433	42.587	0.238	1.2	-9.56	-0.068	-177.89	2.683	99.5
125	17.300	35.653	5.22	17.280	25.950	34.478	42.638	0.290	1.8	-5.16	-0.371	-78.03	1.777	124.3
150	17.165	35.632	5.28	17.140	25.967	34.500	42.665	0.343	2.5	-4.35	-0.299	-66.54	1.641	149.1
200	16.782	35.594	5.10	16.749	26.031	34.578	42.755	0.446	4.3	-10.80	-1.117	-134.70	2.335	198.8
250	16.184	35.537	4.93	16.144	26.129	34.697	42.894	0.546	6.6	-8.69	-0.430	-133.49	2.324	248.5
300	15.665	35.499	4.93	15.618	26.220	34.807	43.022	0.642	9.3	-11.54	-0.677	-166.78	2.598	298.1
350	15.093	35.451	4.94	15.040	26.312	34.920	43.155	0.735	12.4	-11.83	-1.145	-139.78	2.379	347.8
400	14.493	35.400	4.98	14.433	26.405	35.036	43.291	0.824	15.8	-8.49	-0.483	-117.56	2.181	397.4
450	13.995	35.342	5.17	13.930	26.467	35.117	43.391	0.909	19.5	-9.47	-1.260	-85.53	1.861	447.0
500	13.559	35.281	5.18	13.488	26.512	35.180	43.470	0.993	23.6	-11.47	-1.708	-89.44	1.933	496.6
600	12.636	35.145	5.09	12.554	26.595	35.300	43.625	1.156	32.7	-9.15	-1.258	-71.54	1.702	595.7
700	11.533	34.998	5.05	11.442	26.694	35.445	43.813	1.312	43.0	-12.04	-1.571	-91.61	1.926	694.8
800	10.240	34.831	4.99	10.143	26.796	35.603	44.024	1.460	54.3	-13.39	-1.559	-101.83	2.030	793.8
900	8.894	34.694	4.90	8.793	26.912	35.779	44.256	1.597	66.2	-12.44	-1.159	-101.31	2.025	892.8
1000	7.599	34.583	4.72	7.496	27.020	35.948	44.481	1.724	78.5	-14.69	-1.163	-119.74	2.202	991.7
1200	5.317	34.443	4.57	5.213	27.209	36.247	44.885	1.944	103.1	-8.89	-0.213	-88.68	1.895	1189.4
1400	4.115	34.408	4.14	4.003	27.378	36.477	45.171	2.126	127.2	-4.53	0.325	-68.64	1.667	1386.8
1600	3.453	34.575	3.91	3.331	27.515	36.647	45.373	2.277	150.4	-2.93	0.442	-58.22	1.535	1584.0
1800	2.935	34.640	4.05	2.802	27.615	36.775	45.526	2.405	172.5	-1.51	0.349	-37.47	1.232	1781.0
2000	2.775	34.708	4.19	2.627	27.686	36.853	45.612	2.518	194.3	-0.83	0.274	-25.74	1.021	1977.0
2200	2.653	34.751	4.43	2.488	27.732	36.907	45.672	2.621	216.4	-0.67	0.186	-18.88	0.874	2174.4
2400	2.544	34.780	4.62	2.362	27.766	36.947	45.718	2.718	239.1	-0.73	0.100	-14.47	0.765	2370.8
2600	2.433	34.799	4.81	2.235	27.791	36.979	45.756	2.811	262.8	-0.61	0.053	-10.38	0.648	2567.1
2800	2.335	34.806	4.93	2.119	27.807	37.000	45.783	2.901	287.7	-0.60	0.023	-8.63	0.591	2763.1
3000	2.228	34.807	5.00	1.994	27.818	37.018	45.808	2.990	313.9	-0.69	-0.009	-7.90	0.566	2959.0
3200	2.100	34.802	5.02	1.849	27.825	37.034	45.831	3.077	341.5	-0.71	-0.001	-8.86	0.599	3154.7
3400	1.943	34.795	5.07	1.676	27.832	37.051	45.857	3.163	370.3	-1.15	-0.089	-9.36	0.616	3350.2
3600	1.719	34.778	5.05	1.436	27.837	37.069	45.888	3.246	400.1	-1.50	-0.097	-13.65	0.743	3545.6
3800	1.470	34.760	5.06	1.172	27.841	37.088	45.922	3.326	430.1	-1.31	-0.087	-11.99	0.697	3740.8
4000	1.225	34.743	5.08	0.913	27.844	37.107	45.954	3.401	460.1	-1.10	-0.073	-10.26	0.644	3935.8
4200	1.016	34.727	5.09	0.689	27.846	37.121	45.981	3.473	490.2	-1.19	-0.081	-11.27	0.675	4130.6
4400	0.852	34.715	5.11	0.508	27.847	37.133	46.003	3.542	520.2	-0.88	-0.058	-8.60	0.590	4325.2
4600	0.693	34.702	5.12	0.332	27.848	37.144	46.023	3.607	550.3	-1.09	-0.074	-10.79	0.661	4519.7
4755	0.579	34.693	5.15	0.204	27.848	37.152	46.038	3.656	573.5	-0.66	-0.048	-10.79	0.000	4670.3

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	101.6	17.385	17.368	25.930	34.456	42.613	35.656	35.649	5.31	2.29	0.27	0.70	0.11			100	222222255
23	100.6	17.386	17.369	25.930	34.456	42.613	35.656	35.646	5.33	2.30	0.26	0.80	0.08			99	222222255
22	204.4	16.545	16.512	26.081	34.636	42.821	35.586	35.568	4.87	3.50	0.46	4.40	0.01			202	222222255
21	301.0	15.459	15.412	26.267	34.861	43.083	35.500	35.479	5.05	3.68	0.58	5.90	0.02			298	222222255
20	401.2	14.354	14.295	26.433	35.069	43.329	35.390	35.386	5.12	3.69	0.66	7.20	0.02			397	222222255
19	509.4	12.519	12.438	26.619	35.329	43.658	35.147	35.131	5.03	4.71	0.92	11.40	0.01			593	222222255
18	801.3	10.240	10.143	26.794	35.601	44.021	34.828	34.834	4.97	7.62	1.25	17.00	0.00			793	222222255
17	1000.1	7.459	7.358	27.038	35.971	44.511	34.580	34.564	4.67	19.03	1.76	25.30	0.04			990	222222255
16	1199.9	5.046	4.944	27.240	36.292	44.942	34.443	34.429	4.57	35.21	2.21	30.70	0.04			1197	222222255
14	1800.3	2.949	2.816	27.614	36.773	45.523	34.640	34.637	4.02	73.33	2.41	33.50	-0.02			178	222222255
13	2100.0	2.701	2.545	27.709	36.881	45.644	34.729	34.735	4.33	74.51	2.23	31.40	0.00			2073	222222255
12	2402.0	2.545	2.363	27.766	36.947	45.717	34.780	34.780	4.62	71.28	2.12	29.60	-0.01			2370	222222255
11	2703.2	2.391	2.184	27.799	36.989	45.769	34.803	34.804	4.84	69.58	2.05	28.70	0.01			2665	222222255
10	3002.2	2.237	2.004	27.817	37.017	45.806	34.807	34.809	4.98	70.77	2.00	28.10	0.00			2958	222222255
9	3202.1	2.092	1.841	27.826	37.035	45.832	34.802	34.803	4.97	73.32	2.00	28.10	-0.01			3153	222222255
8	3401.4	1.936	1.669	27.832	37.051	45.858	34.794	34.793	4.97	80.11	2.03	28.80	0.03			3340	222222255
7	3603.8	1.727	1.443	27.836	37.068	45.886	34.778	34.779	5.05	87.41	2.13	29.40	0.00			3545	222222255
6	3798.1	1.513	1.481	27.838	37.083	45.914	34.760		5.05	94.55	2.22	30.20	0.04			3735	252222255
5	4000.7	1.236	0.923	27.842	37.104	45.951	34.741	34.744	5.04	103.72	2.23	31.20	0.03			3940	222222255
4	4207.5	1.026	0.698	27.845	37.120	45.979	34.727	34.728	5.09	109.15	2.25	31.40	0.01			4134	222222255
3	4410.6	0.843	0.498	27.846	37.133	46.003	34.713	34.715	5.11	115.77	2.31	32.10	0.01			4331	222222255
2	4610.9	0.688	0.326	27.848	37.144	46.024	34.702	34.705	5.13	120.85	2.35	32.50	0.00			4526	222222255
1	4757.1	0.579	0.204	27.847	37.151	46.038	34.693	34.695	5.13	123.74	2.32	32.60	-0.02			4668	222222255

CRUISE: CD 29 STA: 23 DATE (D/M/Y): 18-11-87 TIME: 2033 LAT: 32 59.65 S LONG: 37 4.82 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79419E-04 1/S SOUND SPEED= 1510.3 M/S Depth= 5108 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.087	35.708	5.53	19.087	25.541	34.011	42.115	0.008	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.087	35.708	5.53	19.087	25.541	34.011	42.115	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.048	35.711	5.47	19.044	25.555	34.026	42.132	0.049	0.0	-16.56	-0.437	-304.57	3.512	19.9
30	18.841	35.714	5.51	18.836	25.610	34.088	42.200	0.073	0.1	-17.93	0.806	-403.72	4.043	29.8
40	18.675	35.717	5.50	18.668	25.655	34.138	42.254	0.096	0.2	-19.92	-0.283	-376.49	3.904	39.8
50	18.452	35.719	5.54	18.443	25.713	34.203	42.326	0.119	0.3	-18.68	0.495	-396.05	4.005	49.7
100	17.369	35.652	5.29	17.352	25.931	34.457	42.615	0.229	1.1	-12.94	-0.834	-196.09	2.818	99.4
125	17.179	35.638	5.25	17.158	25.968	34.500	42.664	0.281	1.7	-5.46	-0.474	-76.25	1.757	124.3
150	17.064	35.629	5.20	17.039	25.989	34.525	42.693	0.333	2.5	-4.12	-0.192	-67.70	1.656	149.1
200	16.867	35.607	5.16	16.835	26.020	34.564	42.739	0.436	4.3	-3.87	-0.238	-58.28	1.536	198.8
250	16.580	35.580	5.08	16.539	26.070	34.624	42.808	0.538	6.6	-9.53	-0.993	-117.59	2.182	248.5
300	15.979	35.527	4.98	15.931	26.170	34.745	42.950	0.637	9.4	-13.38	-1.190	-172.44	2.642	298.1
350	15.340	35.476	4.95	15.288	26.277	34.876	43.102	0.732	12.6	-13.29	-1.035	-174.90	2.661	347.8
400	14.740	35.414	4.98	14.680	26.362	34.984	43.231	0.822	16.0	-10.02	-0.713	-132.44	2.316	397.4
450	14.310	35.375	5.05	14.243	26.426	35.064	43.327	0.910	19.8	-10.73	-1.481	-95.94	1.971	447.0
500	13.825	35.311	5.08	13.752	26.480	35.137	43.418	0.996	24.0	-7.60	-0.919	-73.46	1.725	496.6
600	12.775	35.161	5.01	12.692	26.580	35.279	43.599	1.161	33.3	-10.51	-1.494	-81.21	1.813	595.7
700	11.660	35.005	4.97	11.569	26.675	35.421	43.784	1.320	43.7	-11.64	-1.513	-90.42	1.913	694.8
800	10.453	34.856	4.92	10.355	26.778	35.576	43.988	1.469	55.2	-12.82	-1.417	-104.48	2.057	793.8
900	9.261	34.729	4.87	9.158	26.881	35.731	44.193	1.609	67.3	-11.48	-1.140	-92.12	1.931	892.0
1000	8.050	34.617	4.64	7.944	26.982	35.888	44.401	1.739	79.9	-13.97	-1.225	-111.11	2.121	991.7
1200	5.504	34.438	4.59	5.398	27.183	36.212	44.841	1.966	105.3	-10.03	-0.486	-92.32	1.933	1189.4
1400	4.401	34.504	3.98	4.287	27.362	36.446	45.126	2.153	130.0	-4.40	0.358	-70.26	1.687	1386.8
1600	3.467	34.533	4.00	3.346	27.480	36.612	45.338	2.311	154.1	-4.25	0.168	-55.80	1.503	1584.0
1800	2.988	34.612	4.04	2.855	27.589	36.746	45.494	2.445	177.4	-1.73	0.459	-46.50	1.372	1781.0
2000	2.820	34.690	4.18	2.671	27.674	36.839	45.596	2.561	199.9	-0.96	0.297	-28.55	1.075	1977.8
2200	2.662	34.748	4.42	2.497	27.729	36.903	45.667	2.666	222.3	-0.67	0.207	-20.09	0.902	2174.5
2400	2.565	34.778	4.65	2.383	27.763	36.942	45.712	2.764	245.3	-0.55	0.128	-14.12	0.756	2370.9
2600	2.462	34.796	4.81	2.263	27.787	36.973	45.749	2.858	269.2	-0.73	0.068	-12.65	0.716	2567.1
2800	2.343	34.805	4.91	2.126	27.806	36.999	45.782	2.949	294.2	-0.62	0.020	-8.68	0.593	2763.2
3000	2.226	34.806	4.97	1.993	27.817	37.018	45.807	3.038	320.5	-0.77	-0.010	-8.77	0.596	2959.1
3200	2.089	34.803	5.02	1.838	27.827	37.036	45.833	3.125	348.1	-0.92	-0.043	-8.95	0.602	3154.8
3400	1.885	34.798	5.04	1.619	27.833	37.055	45.864	3.210	376.7	-1.32	-0.083	-11.82	0.692	3350.3
3600	1.636	34.773	5.04	1.356	27.838	37.075	45.898	3.292	405.9	-1.22	-0.080	-10.88	0.664	3545.6
3800	1.411	34.757	5.02	1.116	27.842	37.093	45.929	3.370	435.4	-1.27	-0.084	-11.58	0.685	3740.8
4000	1.174	34.740	5.07	0.864	27.845	37.110	45.960	3.445	465.0	-1.17	-0.077	-10.89	0.664	3935.8
4200	0.954	34.724	5.08	0.629	27.847	37.126	45.989	3.515	494.6	-1.26	-0.086	-11.89	0.694	4130.6
4400	0.762	34.709	5.09	0.421	27.848	37.139	46.013	3.582	523.8	-0.92	-0.062	-8.97	0.603	4325.3
4600	0.662	34.701	5.10	0.302	27.848	37.146	46.027	3.646	553.1	-0.43	-0.031	-4.20	0.413	4519.7
4800	0.601	34.695	5.13	0.221	27.848	37.151	46.036	3.709	583.3	-0.47	-0.034	-4.71	0.437	4714.0
5000	0.536	34.688	5.15	0.135	27.847	37.155	46.046	3.770	614.2	-0.37	-0.027	-3.73	0.388	4908.2
5165	0.512	34.685	5.18	0.092	27.847	37.157	46.050	3.821	640.4	-0.18	-0.017	-3.73	0.000	5068.2

BOTL NO.	PRES DBAR	CTD IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTD PSS78	SALTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	3.5	19.041	19.041	25.559	34.029	42.135	35.715	35.718	5.45	1.43	0.21	0.00	-0.01		1.224	3	222222252
23	103.8	17.354	17.337	25.934	34.461	42.619	35.651	35.653	5.30	2.80	0.34	1.80	0.03	2.106	1.159	102	222222222
22	203.3	16.857	16.824	26.023	34.568	42.742	35.607	35.609	5.17	3.33	0.43	3.40	0.02	2.121	1.200	201	222222222
21	302.3	15.878	15.830	26.191	34.770	42.978	35.524	35.521	4.96	3.84	0.56	5.40	0.00	2.064	1.115	299	222222222
20	403.3	14.615	14.555	26.385	35.012	43.263	35.409	35.412	5.05	3.85	0.62	6.90	-0.01	1.989	1.141	399	222222222
19	601.6	12.632	12.550	26.607	35.312	43.637	35.160	35.141	5.10	4.71	0.93	11.20	0.01	1.728	1.001	596	222222222
18	800.4	10.346	10.248	26.796	35.599	44.015	34.855	34.850	5.01	7.46	1.26	16.60	0.00	1.095	0.616	792	222222222
17	999.8	7.809	7.704	27.018	35.935	44.458	34.618	34.599	4.71	16.70	1.72	24.10	0.00	1.023	0.630	989	222222222
16	1201.9	5.516	5.493	27.183	36.212	44.840	34.440		4.48	33.98	2.14	30.00	-0.01	0.398	0.230	1189	252222222
15	1500.0	3.924	3.806	27.435	36.544	45.246	34.534	34.517	3.98	58.79	2.43	34.10	0.00	0.146	0.107	1483	222222222
14	1799.9	2.989	2.855	27.589	36.746	45.494	34.612	34.609	4.05	70.26	2.41	34.10	0.01			1778	222222255
13	2102.7	2.724	2.567	27.704	36.875	45.636	34.725	34.723	4.32	74.20	2.24	31.80	0.00			2076	222222255
12	2401.5	2.562	2.380	27.763	36.943	45.713	34.778	34.775	4.62	71.13	2.08	29.80	0.00			2369	222222255
11	2702.8	2.398	2.190	27.800	36.990	45.769	34.805	34.806	4.89	69.26	2.00	28.60	0.00			2664	222222255
10	3004.7	2.222	1.988	27.818	37.019	45.809	34.807	34.806	5.03	71.32	1.98	28.30	-0.01			2960	222222255
9	3201.1	2.075	1.825	27.820	37.038	45.836	34.803	34.806	5.04	75.60	1.99	28.50	0.00			3152	222222255
8	3604.9	1.651	1.369	27.838	37.073	45.896	34.773	34.774	5.06	89.64	2.11	29.80	-0.01			3347	222222255
7	3805.0	1.405	1.109	27.843	37.094	45.930	34.757	34.756	5.09	97.34	2.16	30.50	-0.01			3742	222222255
6	4005.4	1.171	0.860	27.845	37.110	45.960	34.739	34.742	5.09	104.54	2.21	31.20	-0.01			3937	222222255
5	4305.0	0.841	0.508	27.848	37.134	46.004	34.716	34.717	5.12	115.32	2.30	32.20	0.00			4229	222222255
4	4610.7	0.653	0.292	27.849	37.148	46.029	34.701	34.700	5.14	121.32	2.32	32.80	0.00			4526	222222255
3	4810.9	0.598	0.547	27.847	37.151	46.037	34.694		5.15	123.55	2.33	32.90	0.00			4720	252222255
2	5012.5	0.529	0.127	27.848	37.156	46.047	34.688	34.688	5.18	125.44	2.34	33.10	-0.01			4916	222222255
1	5168.9	0.509	0.440	27.847	37.158	46.051	34.685		5.15	126.13	2.35	33.10	0.00	0.009	0.054	5068	252222222

CRUISE: CD 29 STA: 24 DATE (D/M/Y): 19-11-87 TIME: 0608 LAT: 33 0.39 S LC IG: 37 59.97 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79445E-04 1/S SOUND SPEED= 1509.7 M/S Depth= 5062 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-5	POT-V	B-V	DEPTH
DBAR	PTS68	PSS78	ML/L	PTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.721	35.715	5.39	18.721	25.640	34.121	42.236	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.721	35.715	5.39	18.721	25.640	34.121	42.237	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.368	35.722	5.26	18.364	25.735	34.227	42.353	0.047	0.0	-17.04	-0.215	-320.41	3.601	19.9
30	18.246	35.716	5.36	18.241	25.762	34.258	42.388	0.069	0.1	-6.38	-0.224	-110.86	2.118	29.8
40	18.212	35.716	5.41	18.205	25.771	34.268	42.399	0.091	0.2	-2.47	-0.011	-47.32	1.384	39.8
50	18.184	35.714	5.42	18.176	25.777	34.275	42.407	0.114	0.3	-22.50	-1.912	-322.53	3.613	49.7
100	16.940	35.630	5.14	16.923	26.017	34.558	42.729	0.218	1.1	-6.43	-0.408	-95.72	1.968	99.4
125	16.873	35.628	5.20	16.852	26.032	34.575	42.749	0.268	1.7	-1.51	-0.022	-26.22	1.030	124.3
150	16.822	35.622	5.09	16.797	26.041	34.586	42.761	0.318	2.4	-3.08	-0.509	-24.33	0.992	149.1
200	16.321	35.559	4.94	16.289	26.112	34.675	42.867	0.418	4.1	-11.93	-1.204	-146.84	2.438	198.8
250	15.807	35.510	4.87	15.767	26.194	34.776	42.985	0.514	6.3	-9.79	-0.898	-122.45	2.226	248.5
300	15.268	35.452	4.85	15.222	26.272	34.874	43.103	0.607	9.0	-8.33	-0.858	-96.21	1.973	298.1
350	14.802	35.411	4.87	14.749	26.345	34.964	43.209	0.698	12.0	-9.50	-0.892	-112.41	2.133	347.7
400	14.369	35.364	4.85	14.310	26.403	35.039	43.299	0.786	15.3	-10.92	-1.173	-117.13	2.177	397.4
450	13.827	35.300	4.88	13.762	26.470	35.127	43.407	0.871	19.0	-9.19	-1.151	-85.83	1.864	447.0
500	13.433	35.256	5.07	13.361	26.518	35.191	43.486	0.955	23.1	-7.87	-1.064	-67.08	1.648	496.5
600	12.549	35.129	5.05	12.467	26.600	35.308	43.637	1.117	32.2	-9.00	-1.268	-68.63	1.667	595.7
700	11.652	35.004	4.94	11.560	26.676	35.422	43.786	1.274	42.6	-10.20	-1.317	-79.17	1.790	694.8
800	10.526	34.863	4.93	10.427	26.772	35.567	43.976	1.424	54.0	-11.20	-1.312	-86.99	1.877	793.8
900	9.282	34.727	4.84	9.179	26.876	35.725	44.186	1.564	66.2	-13.82	-1.408	-109.43	2.105	892.8
1000	7.842	34.593	4.70	7.738	26.993	35.909	44.432	1.694	78.8	-13.84	-1.138	-113.50	2.143	991.7
1200	5.367	34.422	4.59	5.262	27.186	36.222	44.858	1.920	104.3	-11.21	-0.527	-97.75	1.989	1189.3
1400	4.051	34.439	4.35	3.941	27.346	36.449	45.146	2.106	128.6	-4.70	0.194	-62.34	1.588	1386.8
1600	3.389	34.511	4.15	3.268	27.469	36.606	45.336	2.265	152.9	-2.60	0.500	-58.06	1.533	1584.0
1800	2.952	34.610	4.12	2.820	27.590	36.749	45.500	2.399	176.2	-1.98	0.393	-45.19	1.353	1781.0
2000	2.785	34.690	4.19	2.636	27.670	36.838	45.596	2.515	198.7	-0.86	0.310	-28.26	1.070	1977.8
2200	2.648	34.743	4.47	2.484	27.726	36.900	45.666	2.620	221.1	-0.59	0.199	-18.67	0.869	2174.4
2400	2.545	34.775	4.61	2.364	27.761	36.942	45.713	2.719	244.2	-0.64	0.137	-15.65	0.796	2370.8
2600	2.470	34.804	4.87	2.271	27.793	36.978	45.753	2.812	268.0	-0.68	0.053	-11.23	0.674	2567.1
2800	2.320	34.804	4.89	2.104	27.806	37.001	45.785	2.903	292.9	-0.61	0.034	-9.38	0.616	2763.1
3000	2.209	34.805	4.98	1.976	27.817	37.019	45.809	2.991	319.1	-0.87	-0.014	-9.78	0.629	2959.0
3200	2.031	34.798	5.01	1.782	27.827	37.039	45.840	3.078	346.4	-0.96	-0.048	-9.12	0.608	3154.7
3400	1.865	34.788	5.02	1.600	27.833	37.056	45.866	3.162	374.7	-0.88	-0.054	-7.94	0.567	3350.2
3600	1.645	34.774	5.04	1.365	27.838	37.074	45.897	3.244	404.0	-1.44	-0.093	-12.99	0.725	3545.6
3800	1.422	34.758	5.04	1.126	27.842	37.092	45.928	3.322	433.5	-1.13	-0.073	-10.35	0.647	3740.8
4000	1.198	34.741	5.06	0.887	27.845	37.108	45.957	3.397	463.2	-1.16	-0.076	-10.78	0.660	3935.8
4200	0.977	34.725	5.07	0.651	27.847	37.124	45.986	3.468	492.9	-1.18	-0.079	-11.24	0.674	4130.6
4400	0.796	34.711	5.10	0.454	27.848	37.137	46.009	3.535	522.4	-0.85	-0.057	-8.30	0.580	4325.2
4600	0.694	34.703	5.13	0.333	27.848	37.144	46.024	3.600	552.1	-0.41	-0.029	-3.95	0.400	4519.7
4800	0.641	34.697	5.13	0.259	27.847	37.148	46.032	3.663	582.7	-0.37	-0.026	-3.80	0.392	4714.0
5000	0.601	34.692	5.17	0.190	27.847	37.152	46.038	3.727	614.3	-0.29	-0.021	-3.04	0.351	4908.1
5127	0.573	34.690	5.15	0.155	27.847	37.154	46.044	3.767	634.9	-0.34	-0.019	-3.04	0.000	5031.3

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	PTS68	PTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.0	19.020	19.019	25.564	34.036	42.142	35.715	35.723	5.26	1.24	0.20	0.00	0.01	2.033	1.179	2	22222222
23	101.1	16.932	16.915	26.019	34.560	42.732	35.630	35.627	5.18	3.11	0.37	2.30	0.04	2.096	1.226	100	22222222
22	203.5	16.245	16.212	26.127	34.692	42.887	35.555	35.549	4.88	3.64	0.50	4.70	-0.01	1.968	1.109	201	22222222
21	303.4	15.122	15.092	26.305	34.912	43.145	35.452		4.82	3.98	0.58	6.10	0.03	2.030	1.116	300	25222222
20	401.0	14.272	14.213	26.423	35.063	43.326	35.363	35.354	4.79	4.33	0.73	8.40	0.02	1.805	1.021	397	22222222
19	602.1	12.452	12.370	26.616	35.329	43.661	35.126	35.111	4.98	5.01	0.95	11.70	0.01	1.651	0.932	596	22222222
18	802.3	10.337	10.239	26.803	35.606	44.022	34.862	34.835	4.85	7.75	1.27	17.20	0.02	1.069	0.592	794	22222222
17	999.4	7.729	7.625	27.011	35.932	44.459	34.594	34.580	4.75	16.98	1.72	24.40	0.01	0.718	0.412	989	22222222
14	1799.7	2.946	2.813	27.591	36.750	45.501	34.610	34.615	4.11	70.79	2.35	33.90	0.00	0.059	0.046	1778	22222222
13	2099.1	2.693	2.537	27.702	36.875	45.638	34.719	34.717	4.24	76.25	2.23	32.10	0.00			2072	22222255
12	2400.9	2.526	2.345	27.763	36.945	45.717	34.775	34.778	4.61	72.32	2.07	30.20	0.01	0.026		2368	22222255
11	2702.5	2.372	2.165	27.797	36.989	45.769	34.799	34.799	4.83	70.96	1.97	29.00	-0.01			2664	22222255
10	3005.0	2.202	1.969	27.818	37.020	45.811	34.805	34.806	4.95	72.15	2.01	28.70	0.02			2960	22222255
9	3205.5	2.060	1.809	27.825	37.036	45.835	34.798	34.802	4.95	76.59	1.95	28.90	0.01			3156	22222255
8	3607.7	1.653	1.371	27.837	37.073	45.896	34.773	34.777	4.96	89.58	2.04	30.00	-0.01			3549	22222255
7	3808.4	1.409	1.380	27.843	37.093	45.930	34.757		5.00	97.94	2.12	30.00	0.02			3745	25222255
6	4007.4	1.191	0.879	27.844	37.109	45.958	34.740	34.744	5.06	103.58	2.15	31.30	0.01	0.009		3939	22222255
5	4309.4	0.866	0.832	27.848	37.132	46.000	34.717		5.10	115.02	2.23	32.40	0.01			4233	25222255
4	4610.4	0.691	0.329	27.848	37.144	46.024	34.702	34.702	5.11	120.82	2.26	32.90	0.01			4526	22222255
3	4811.4	0.638	0.255	27.847	37.148	46.032	34.696	34.699	5.11	121.85	2.27	33.00	0.00			4721	22222255
2	5014.2	0.600	0.194	27.847	37.152	46.039	34.692	34.693	5.12	124.24	2.28	33.30	0.00			4918	22222255
1	5133.1	0.572	0.502	27.848	37.155	46.044	34.690		5.14	125.26	2.31	33.40	-0.01	0.000		5033	25222255

CRUISE: CD 29 STA: 25 DATE (D/M/Y): 19-11-87 TIME: 1802 LAT: 32 59.42 S LONG: 39 29.43 E

GRAVITY= 9.7956 M/S CORIOLIS= - 79411E-04 1/S SOUND SPEED= 1509.7 M/S Depth= 5892 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.944	35.669	4.77	18.944	25.548	34.022	42.132	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.944	35.669	4.77	18.944	25.548	34.023	42.132	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.537	35.702	5.29	18.534	25.678	34.165	42.286	0.048	0.0	-92.07	-1.854	-1694.45	8.284	19.9
30	18.024	35.689	5.38	18.019	25.796	34.300	42.437	0.070	0.1	-22.19	-1.020	-367.35	3.857	29.8
40	17.697	35.663	5.47	17.690	25.857	34.372	42.519	0.092	0.2	-18.71	-0.918	-302.72	3.501	39.8
50	17.575	35.659	5.33	17.567	25.885	34.404	42.554	0.113	0.3	-17.96	-0.721	-298.37	3.476	49.7
100	17.071	35.639	5.13	17.054	25.993	34.529	42.696	0.217	1.1	-6.22	-0.287	-99.66	2.009	99.4
125	16.990	35.635	5.16	16.969	26.010	34.549	42.719	0.268	1.7	-2.90	-0.278	-38.10	1.242	124.3
150	16.936	35.628	5.14	16.911	26.019	34.568	42.732	0.319	2.4	-1.92	-0.193	-24.49	0.996	149.1
200	16.831	35.619	5.18	16.798	26.038	34.583	42.759	0.421	4.2	-3.53	-0.430	-40.23	1.276	198.8
250	16.448	35.571	4.96	16.407	26.094	34.653	42.841	0.522	6.5	-11.66	-1.213	-142.81	2.4	248.5
300	16.079	35.556	5.19	16.031	26.169	34.741	42.942	0.620	9.3	-8.06	-0.829	-97.18	1.984	298.1
350	15.524	35.483	4.82	15.469	26.241	34.834	43.054	0.715	12.4	-14.47	-1.465	-170.98	2.631	347.8
400	14.801	35.412	4.84	14.741	26.347	34.967	43.212	0.807	15.9	-10.74	-1.193	-116.52	2.172	397.4
450	14.360	35.371	4.98	14.293	26.413	35.049	43.310	0.895	19.8	-12.09	-1.305	-129.65	2.291	447.0
500	13.715	35.292	5.06	13.641	26.489	35.151	43.435	0.981	23.9	-10.54	-1.280	-100.80	2.020	496.6
600	12.574	35.130	4.97	12.492	26.595	35.303	43.631	1.145	33.1	-11.38	-1.550	-91.06	1.920	595.7
700	11.512	34.988	5.00	11.421	26.690	35.442	43.811	1.301	43.5	-11.88	-1.551	-89.97	1.909	694.8
800	10.296	34.837	4.91	10.199	26.791	35.595	44.013	1.449	54.8	-11.31	-1.275	-89.42	1.903	793.8
900	8.929	34.695	4.82	8.828	26.907	35.773	44.248	1.587	66.7	-16.78	-1.595	-134.51	2.334	892.8
1000	7.424	34.563	4.75	7.323	27.030	35.965	44.506	1.712	78.8	-13.76	-1.051	-111.40	2.124	991.7
1200	4.976	34.409	4.73	4.875	27.221	36.277	44.931	1.929	103.0	-8.79	-0.238	-84.40	1.849	1189.3
1400	3.742	34.451	4.39	3.635	27.387	36.505	45.217	2.108	126.7	-4.54	0.478	-77.25	1.769	1386.0
1600	3.138	34.542	4.17	3.020	27.518	36.667	45.409	2.256	149.3	-2.33	0.434	-50.81	1.434	1584.0
1800	2.834	34.635	4.13	2.702	27.620	36.785	45.541	2.381	171.1	-1.33	0.340	-34.81	1.187	1781.0
2000	2.664	34.682	4.26	2.517	27.674	36.848	45.613	2.493	192.7	-0.39	0.237	-18.60	0.868	1977.8
2200	2.662	34.742	4.35	2.497	27.724	36.896	45.662	2.598	215.1	-0.59	0.219	-19.96	0.899	2174.4
2400	2.552	34.777	4.62	2.370	27.763	36.943	45.714	2.696	238.1	-0.64	0.119	-14.63	0.770	2370.8
2600	2.415	34.793	4.75	2.217	27.788	36.977	45.755	2.789	261.9	-0.70	0.059	-11.81	0.692	2567.1
2800	2.329	34.802	4.89	2.113	27.804	36.998	45.781	2.880	286.9	-0.58	0.034	-8.96	0.602	2763.1
3000	2.221	34.805	4.99	1.988	27.817	37.018	45.807	2.969	313.2	-0.67	0.006	-8.52	0.587	2959.0
3200	2.095	34.801	5.02	1.845	27.824	37.033	45.830	3.056	340.8	-0.72	-0.025	-7.42	0.548	3154.7
3400	1.926	34.793	5.05	1.659	27.832	37.052	45.859	3.142	369.6	-1.25	-0.081	-11.05	0.669	3350.2
3600	1.685	34.775	5.04	1.403	27.837	37.071	45.891	3.224	399.1	-1.33	-0.089	-11.89	0.694	3545.6
3800	1.468	34.760	5.05	1.171	27.841	37.089	45.922	3.304	429.0	-1.38	-0.091	-12.63	0.715	3740.7
4000	1.205	34.740	5.07	0.894	27.844	37.107	45.955	3.379	458.9	-1.35	-0.093	-12.40	0.709	3935.7
4200	0.965	34.724	5.09	0.640	27.847	37.125	45.987	3.450	488.6	-1.24	-0.086	-11.66	0.687	4130.6
4400	0.791	34.711	5.10	0.449	27.848	37.137	46.010	3.517	518.0	-0.79	-0.055	-7.57	0.554	4325.2
4600	0.688	34.702	5.12	0.327	27.848	37.144	46.024	3.582	547.7	-0.49	-0.036	-4.81	0.442	4519.7
4800	0.640	34.697	5.13	0.258	27.848	37.148	46.032	3.645	578.2	-0.28	-0.015	-3.12	0.355	4714.0
5000	0.614	34.694	5.15	0.210	27.848	37.151	46.038	3.709	609.9	-0.42	-0.031	-4.23	0.414	4908.1
5145	0.534	34.687	5.19	0.116	27.847	37.157	46.048	3.754	633.5	-0.74	-0.044	-4.23	0.000	5048.8

BOTL	PRES	CTDMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	0.0	18.927	18.926	25.577	34.052	42.161	35.701	35.706	5.37	1.18	0.21	0.40	0.00	2.084	1.196	7	22222222
23	103.0	17.079	17.062	25.992	34.528	42.694	35.640	35.639	5.33	2.70	0.38	2.40	0.04			102	22222225
21	302.5	16.006	15.958	26.181	34.755	42.958	35.549	35.545	5.05	3.73	0.58	4.90	0.03	2.079	1.188	299	22222222
20	450.7	14.264	14.198	26.431	35.071	43.335	35.369	35.357	4.95	4.24	0.74	8.30	0.02	1.873	1.164	446	22222222
19	600.9	12.725	12.642	26.565	35.267	43.589	35.129	35.148	4.97	5.08	0.95	11.70	0.01	1.650	0.929	595	22222222
18	800.5	10.378	10.280	26.775	35.577	43.992	34.835	34.851	4.93	7.82	1.27	16.90	0.01	1.140	0.717	792	22222222
17	1000.9	7.397	7.295	27.033	35.970	44.512	34.563	34.564	4.75	18.56	1.80	25.30	0.00	0.714	0.465	990	22222222
16	1200.4	4.923	4.906	27.227	36.285	44.941	34.409		4.71	32.55	2.15	30.20	0.00	0.662	0.377	1187	25222222
15	1496.4	3.439	3.327	27.460	36.594	45.321	34.506	34.491	4.18	59.53	2.44	34.30	0.00	0.158	0.138	1479	22222222
14	1799.5	2.894	2.762	27.615	36.777	45.530	34.635	34.627	4.11	73.20	2.34	34.00	0.01	0.042	0.054	1778	22222222
13	2102.5	2.659	2.504	27.703	36.877	45.642	34.716	34.703	4.30	76.29	2.28	32.40	0.00	0.042	0.032	2075	22222222
12	2401.4	2.556	2.375	27.762	36.943	45.713	34.777	34.776	4.65	71.06	2.08	30.10	0.00			2369	22222255
11	2703.4	2.361	2.154	27.798	36.989	45.771	34.798	34.797	4.84	72.22	2.01	29.10	0.00			2665	22222255
10	3004.3	2.226	1.992	27.816	37.017	45.806	34.805	34.804	5.01	72.57	1.97	28.60	0.01	0.009		2960	22222225
9	3306.1	2.029	1.769	27.830	37.043	45.844	34.800	34.800	5.06	77.38	1.97	28.70	0.01			3255	22222255
8	3606.4	1.660	1.378	27.839	37.074	45.896	34.775	34.774	5.06	90.03	2.06	30.00	0.01			3548	22222255
7	3908.5	1.278	0.974	27.847	37.106	45.949	34.751	34.748	5.09	102.21	2.12	31.10	0.01			3843	22222255
6	4112.6	1.045	0.726	27.848	37.121	45.978	34.732	34.733	5.08	109.08	2.22	31.60	0.01			4041	22222255
5	4309.2	0.848	0.514	27.848	37.133	46.003	34.716	34.716	5.10	115.43	2.25	32.30	0.01	0.001	0.000	4233	22222222
4	4510.1	0.723	0.371	27.848	37.142	46.019	34.706	34.706	5.11	119.56	2.26	32.50	0.00			4428	22222255
3	4710.5	0.656	0.284	27.847	37.146	46.028	34.698	34.700	5.14	122.67	2.32	32.90	0.00			4623	22222255
2	4912.6	0.624	0.230	27.847	37.150	46.035	34.695	34.698	5.13	123.56	2.31	32.80	0.00			4919	22222255
1	5158.5	0.521	0.101	27.848	37.158	46.051	34.687	34.685	5.13	126.15	2.35	33.00	-0.01	0.005		5058	22222225

CRUISE: CD 29 STA: 26 DATE (D/M/Y): 20-11-87 TIME: 0540 LAT: 33 0 32 S LONG: 41 0 34 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79443E-04 1/S SOUND SPEED= 1508.7 M/S Depth= 5010 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-TT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.052	35.646	5.40	19.052	25.503	33.974	42.081	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.052	35.646	5.40	19.052	25.503	33.975	42.081	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.322	35.651	5.55	18.318	25.692	34.187	42.315	0.049	0.0	-02.39	-0.688	-1566.66	7.963	19.9
30	17.959	35.649	5.44	17.954	25.782	34.288	42.427	0.071	0.1	-22.05	0.652	-463.50	4.331	29.8
40	17.823	35.650	5.42	17.816	25.816	34.327	42.470	0.093	0.2	-8.17	0.442	-183.00	2.722	39.8
50	17.728	35.652	5.39	17.717	25.842	34.356	42.503	0.115	0.3	-14.65	-1.054	-217.39	2.966	49.7
100	17.117	35.635	5.33	17.100	25.979	34.514	42.679	0.220	1.1	-10.29	-0.826	-143.90	2.413	99.4
125	16.889	35.617	5.05	16.868	26.019	34.562	42.735	0.271	1.7	-10.48	-0.948	-142.47	2.401	124.3
150	16.537	35.580	5.04	16.513	26.076	34.631	42.816	0.321	2.4	-19.28	-1.734	-259.76	3.243	149.1
200	15.988	35.538	5.19	15.957	26.172	34.747	42.950	0.417	4.1	-9.39	-0.895	-116.12	2.168	198.8
250	15.351	35.467	4.98	15.312	26.264	34.862	43.088	0.511	6.2	-10.40	-0.951	-127.61	2.273	248.5
300	14.929	35.431	4.93	14.884	26.330	34.945	43.185	0.601	8.8	-5.08	-0.175	-78.29	1.780	298.1
350	14.478	35.392	4.98	14.426	26.400	35.031	43.287	0.689	11.7	-12.92	-1.697	-120.58	2.209	347.7
400	13.966	35.325	5.03	13.908	26.459	35.110	43.385	0.774	14.9	-10.47	-1.308	-98.14	1.993	397.3
450	13.461	35.262	5.06	13.397	26.516	35.187	43.480	0.857	18.5	-9.08	-0.979	-91.64	1.926	446.9
500	13.010	35.196	5.04	12.947	26.558	35.247	43.558	0.938	22.5	-9.32	-1.333	-71.76	1.784	496.5
600	11.887	35.038	5.02	11.814	26.656	35.392	43.746	1.095	31.3	-11.43	-1.509	-86.53	1.872	595.7
700	10.555	34.869	4.98	10.469	26.769	35.562	43.969	1.244	41.1	-11.59	-1.354	-89.32	1.901	694.7
800	9.241	34.724	4.90	9.150	26.878	35.729	44.191	1.382	51.7	-11.94	-1.219	-91.80	1.928	793.8
900	7.875	34.598	4.79	7.781	26.991	35.905	44.426	1.510	62.8	-16.40	-1.418	-126.43	2.262	892.7
1000	6.328	34.474	4.78	6.235	27.107	36.095	44.685	1.626	74.0	-13.86	-0.905	-109.65	2.107	991.6
1200	4.279	34.416	4.62	4.184	27.302	36.393	45.079	1.822	95.9	-6.20	0.158	-75.49	1.748	1189.2
1400	3.494	34.491	4.29	3.389	27.443	36.573	45.297	1.984	117.3	-1.86	0.495	-49.53	1.416	1386.6
1600	3.174	34.597	4.01	3.056	27.558	36.705	45.443	2.123	138.6	-1.86	0.432	-45.90	1.363	1583.8
1800	2.939	34.675	4.08	2.806	27.643	36.802	45.552	2.244	159.6	-1.02	0.404	-35.47	1.198	1780.8
2000	2.755	34.724	4.18	2.607	27.700	36.868	45.628	2.352	180.5	-0.79	0.162	-18.48	0.865	1977.6
2200	2.623	34.760	4.49	2.458	27.741	36.917	45.684	2.453	202.1	-0.61	0.189	-18.26	0.860	2174.2
2400	2.517	34.789	4.76	2.336	27.776	36.958	45.730	2.548	224.4	-0.56	0.123	-13.91	0.750	2370.7
2600	2.413	34.803	4.87	2.215	27.796	36.985	45.763	2.640	247.7	-0.75	0.024	-10.22	0.643	2566.9
2800	2.274	34.806	4.99	2.059	27.811	37.008	45.794	2.729	272.2	-0.75	0.010	-9.60	0.623	2763.0
3000	2.152	34.804	5.02	1.920	27.821	37.025	45.819	2.815	297.9	-0.77	-0.021	-8.06	0.571	2958.8
3200	2.040	34.801	5.05	1.791	27.829	37.040	45.840	2.901	325.0	-0.58	-0.023	-5.87	0.487	3154.5
3400	1.917	34.792	5.06	1.651	27.832	37.052	45.860	2.986	353.5	-0.95	-0.063	-8.30	0.580	3350.1
3600	1.725	34.779	5.04	1.442	27.837	37.069	45.887	3.069	383.2	-1.27	-0.084	-11.37	0.679	3545.4
3800	1.478	34.761	5.04	1.180	27.841	37.088	45.921	3.149	413.2	-1.26	-0.081	-11.65	0.687	3740.6
4000	1.252	34.745	5.05	0.940	27.845	37.105	45.951	3.225	443.4	-1.03	-0.067	-9.72	0.627	3935.6
4200	0.997	34.727	5.08	0.671	27.847	37.123	45.984	3.297	473.6	-1.41	-0.094	-13.46	0.738	4130.4
4400	0.819	34.713	5.10	0.476	27.848	37.136	46.007	3.364	503.2	-0.91	-0.061	-8.81	0.597	4325.0
4600	0.686	34.703	5.12	0.325	27.849	37.145	46.025	3.429	533.0	-0.55	-0.038	-5.46	0.470	4519.5
4800	0.629	34.697	5.13	0.248	27.848	37.149	46.034	3.492	563.3	-0.21	-0.016	-2.05	0.288	4713.8
5000	0.618	34.695	5.13	0.213	27.848	37.151	46.037	3.556	594.9	-0.19	-0.014	-2.05	0.000	4908.0
5097	0.609	34.693	5.15	0.194	27.848	37.153	46.040	3.586	610.8	-0.20	-0.017	-2.05	0.000	5002.1

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUAL1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
24	102.3	17.133	17.116	25.974	34.508	42.673	35.634	35.636	5.36	2.68	0.36	1.40	0.29	2.292	1.304	101	22222222	
23	202.2	15.971	15.939	26.174	34.750	42.954	35.535	35.530	5.10	4.21	0.59	5.00	0.01			200	22222225	
22	302.2	14.846	14.800	26.350	34.968	43.210	35.433	35.429	4.99	4.37	0.68	6.90	0.02	2.106	1.084	299	22222222	
21	451.5	13.292	13.229	26.549	35.226	43.526	35.260	35.242	5.00	5.21	0.90	10.00	0.01	1.883	0.915	447	22222222	
20	601.4	11.719	11.640	26.686	35.429	43.789	35.036	35.022	5.04	6.06	1.12	13.40	0.01	1.541	0.755	595	22222222	
19	800.1	9.270	9.119	26.872	35.722	44.183	34.722	34.722	4.89	11.15	1.49	19.80	0.02	0.977	0.520	792	22222222	
18	999.9	6.319	6.225	27.109	36.097	44.688	34.475	34.475	4.76	23.54	2.01	27.40	0.01	0.908	0.452	989	22222222	
17	1202.0	4.374	4.278	27.292	36.377	45.059	34.415	34.412	4.62	41.01	2.32	31.60	0.01	0.546	0.271	1189	22222222	
16	1502.0	3.356	3.244	27.501	36.638	45.368	34.547	34.554	4.05	65.11	2.45	33.70	0.00	0.183	0.152	1485	22222222	
14	2102.0	2.644	2.488	27.722	36.897	45.662	34.739	34.747	4.34	78.31	2.28	31.30	0.00	0.020	0.030	2075	22222222	
13	2402.9	2.497	2.316	27.778	36.961	45.734	34.790	34.793	4.03	68.63	2.06	28.90	0.00	0.014	0.014	2370	22222222	
12	2702.4	2.333	2.127	27.805	36.999	45.781	34.805	34.804	4.92	70.82	2.03	28.40	0.00			2664	22222225	
11	3004.2	2.157	1.924	27.821	37.025	45.818	34.804	34.802	4.98	74.19	2.03	28.40	0.00			2960	22222225	
10	3306.1	1.999	1.740	27.829	37.044	45.847	34.797	34.797	5.04	77.74	2.00	28.40	0.00			3255	22222225	
9	3607.6	1.729	1.445	27.836	37.068	45.886	34.778	34.777	5.03	87.56	2.12	29.40	0.00	0.009	0.000	3549	22222222	
8	3907.5	1.344	1.039	27.844	37.098	45.939	34.752	34.751	5.05	89.57	2.17	30.60	0.00			3842	22222225	
7	4110.4	1.135	0.814	27.846	37.114	45.967	34.737	34.737	5.06	106.50	2.20	31.10	0.01			4039	22222225	
6	4310.7	0.894	0.559	27.848	37.131	45.998	34.720	34.720	5.10	113.93	2.25	31.90	0.00			4234	22222225	
5	4511.4	0.727	0.375	27.849	37.143	46.020	34.707	34.705	5.12	119.34	2.30	32.30	-0.01			4429	22222225	
4	4710.6	0.648	0.276	27.848	37.148	46.030	34.699	34.699	5.14	121.85	2.32	32.50	-0.01	0.009		4623	22222225	
3	4913.8	0.624	0.230	27.848	37.151	46.036	34.696	34.696	5.12	123.01	2.32	32.60	0.00			4820	22222225	
2	5100.0	0.608	0.192	27.848	37.153	46.040	34.693	34.692	5.12	124.00	2.30	32.70	0.00			5001	22222225	

CRUISE: CD 29 STA: 27 DATE (D/M/Y): 20-11-87 TIME: 1752 LAT. 32 59.71 S LONG. 42 44.8 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79421E-04 1/S SOUND SPEED= 1505.3 M/S Depth= 4352 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	CRD-PT C/DB 10-3	CRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	28.591	35.505	5.50	20.591	24.991	33.416	41.480	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	28.591	35.505	5.50	20.591	24.991	33.417	41.480	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	28.400	35.574	5.43	20.396	25.096	33.527	41.595	0.059	0.1	-42.90	10.635	-1522.80	7.852	19.9
30	19.907	35.664	5.42	19.902	25.296	33.740	41.822	0.086	0.1	-29.00	-0.274	-578.90	4.841	29.9
40	19.324	35.646	5.48	19.317	25.434	33.897	41.996	0.113	0.2	-107.52	-1.828	-2051.96	9.115	39.8
50	18.294	35.641	5.68	18.285	25.693	34.189	42.318	0.137	0.3	-54.11	0.407	-1080.52	6.614	49.8
100	17.219	35.629	5.21	17.203	25.949	34.481	42.643	0.244	1.2	-11.57	-1.147	-149.14	2.457	99.5
125	16.922	35.598	4.91	16.901	25.998	34.540	42.712	0.296	1.7	-13.02	-0.705	-195.20	2.011	124.3
150	16.624	35.586	5.08	16.599	26.060	34.613	42.795	0.346	2.4	-9.92	-0.596	-148.22	2.450	149.1
200	15.987	35.532	4.87	15.955	26.168	34.743	42.947	0.444	4.2	-13.20	-1.210	-166.43	2.596	198.8
250	15.336	35.478	4.89	15.297	26.276	34.874	43.100	0.537	6.3	-12.41	-1.127	-152.31	2.483	248.5
300	14.890	35.435	4.87	14.844	26.342	34.958	43.199	0.626	8.8	-9.66	-0.908	-113.66	2.145	298.1
350	14.299	35.381	5.11	14.247	26.430	35.068	43.330	0.713	11.7	-6.10	-0.455	-77.04	1.766	347.8
400	13.886	35.334	5.20	13.828	26.482	35.136	43.414	0.797	14.9	-10.96	-1.334	-104.79	2.060	397.4
450	13.493	35.280	5.23	13.429	26.523	35.193	43.485	0.879	18.5	-6.97	-0.905	-61.52	1.578	447.0
500	13.118	35.226	5.13	13.047	26.559	35.244	43.550	0.961	22.4	-8.58	-1.291	-63.29	1.601	496.6
600	12.232	35.088	5.12	12.151	26.629	35.350	43.691	1.120	31.4	-12.27	-1.826	-85.16	1.857	595.7
700	11.044	34.932	5.02	10.955	26.731	35.503	43.891	1.272	41.5	-11.49	-1.360	-92.79	1.938	694.8
800	9.964	34.808	4.98	9.868	26.825	35.644	44.075	1.416	52.5	-12.67	-1.380	-99.44	2.007	793.8
900	8.613	34.668	4.81	8.514	26.935	35.815	44.304	1.551	64.1	-15.24	-1.561	-111.94	2.129	892.8
1000	7.158	34.542	4.72	7.058	27.050	35.998	44.551	1.674	76.0	-16.71	-1.300	-130.72	2.301	991.7
1200	4.968	34.431	4.56	4.867	27.239	36.295	44.949	1.885	99.7	-8.65	-0.257	-80.99	1.811	1189.3
1400	3.744	34.454	4.36	3.637	27.389	36.507	45.219	2.062	123.0	-3.87	0.513	-72.04	1.708	1386.7
1600	3.229	34.556	4.11	3.110	27.521	36.665	45.402	2.208	145.4	-1.77	0.417	-43.88	1.333	1583.9
1800	2.858	34.617	4.17	2.727	27.604	36.768	45.523	2.335	167.4	-1.55	0.329	-36.42	1.214	1780.9
2000	2.599	34.687	4.24	2.552	27.675	36.847	45.610	2.449	189.4	-1.02	0.181	-22.04	0.945	1977.7
2200	2.644	34.732	4.36	2.480	27.717	36.893	45.658	2.554	211.9	-0.46	0.229	-19.10	0.879	2174.3
2400	2.527	34.771	4.54	2.346	27.760	36.942	45.714	2.653	235.2	-0.41	0.184	-15.84	0.801	2370.8
2600	2.418	34.791	4.73	2.220	27.787	36.975	45.753	2.747	259.1	-0.74	0.068	-12.76	0.719	2567.0
2800	2.291	34.799	4.83	2.076	27.804	37.000	45.786	2.838	284.0	-0.73	0.029	-10.34	0.647	2763.1
3000	2.119	34.801	4.93	1.888	27.821	37.027	45.822	2.925	310.0	-1.10	-0.019	-12.26	0.705	2959.0
3200	1.960	34.794	4.98	1.712	27.829	37.045	45.850	3.010	336.7	-1.18	-0.062	-10.89	0.664	3154.7
3400	1.748	34.782	5.01	1.485	27.836	37.065	45.882	3.092	364.2	-1.17	-0.066	-10.71	0.658	3350.2
3600	1.415	34.760	5.03	1.141	27.843	37.092	45.927	3.170	392.0	-2.00	-0.127	-17.83	0.850	3545.5
3800	1.051	34.735	5.06	0.765	27.848	37.119	45.974	3.241	418.9	-1.50	-0.099	-13.25	0.732	3740.7
4000	0.862	34.722	5.10	0.561	27.850	37.132	45.999	3.307	445.4	-0.46	-0.030	-4.19	0.412	3935.7
4200	0.766	34.713	5.12	0.446	27.850	37.139	46.012	3.372	472.5	-0.55	-0.036	-5.17	0.457	4130.5
4400	0.705	34.707	5.14	0.366	27.850	37.144	46.022	3.438	500.5	-0.64	-0.045	-5.17	0.000	4325.1
4417	0.683	34.706	5.13	0.342	27.850	37.146	46.024	3.441	502.9	-0.75	-0.051	-5.17	0.000	4341.7

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT
4	5.0	20.533	20.532	25.008	33.436	41.501	35.507	35.521	5.37	1.89	0.10	0.10	0.01	1.852	1.067	4	22222222
3	32.1	19.700	19.702	25.345	33.796	41.883	35.660	35.649	5.40	2.06	0.13	0.10	0.02	2.022	1.120	31	22222222
2	103.3	17.177	17.168	25.951	34.484	42.648	35.617	35.625	5.22	3.44	0.33	2.00	0.10	2.043	1.204	102	22222222
1	203.1	16.035	16.003	26.153	34.726	42.928	35.526	35.542	5.13	3.61	0.48	4.50	0.02	2.494	1.202	201	22222222
24	302.8	14.986	14.948	26.320	34.932	43.170	35.433	35.447	4.88	4.60	0.49	6.90	0.01	1.903	1.034	300	22222222
23	451.5	13.592	13.527	26.502	35.168	43.457	35.279	35.291	5.16	4.59	0.84	8.50	0.02	1.965	1.071	447	22222222
22	604.2	12.141	12.060	26.639	35.364	43.708	35.078	35.074	5.13	5.46	0.93	12.20	0.01	1.674	0.900	598	22222222
21	702.0	11.042	10.953	26.732	35.504	43.891	34.932	34.920	5.01	6.66	1.12	15.00	0.01	1.314	0.683	695	22222222
20	801.6	10.002	9.906	26.816	35.634	44.064	34.805	34.800	4.99	8.55	1.31	17.50	0.00	0.918	0.547	793	22222222
19	1000.6	7.085	6.986	27.060	36.011	44.567	34.542	34.539	4.72	20.13	1.87	26.10	0.00	0.651	0.358	990	22222222
18	1202.3	4.892	4.791	27.246	36.305	44.962	34.428	34.427	4.61	36.02	2.28	30.60	0.00	0.481	0.273	1189	22222222
17	1401.3	3.737	3.629	27.390	36.509	45.221	34.455	34.460	4.29	53.64	2.53	33.40	-0.01	0.230	0.105	1385	22222222
16	1600.4	3.236	3.117	27.521	36.665	45.401	34.557	34.552	4.10	66.79	2.55	33.90	0.00	0.082	0.050	1582	22222222
15	1900.3	2.785	2.783	27.647	36.815	45.573	34.662		4.19	74.40	2.46	32.50	0.00			1877	25222255
14	2201.8	2.632	2.626	27.718	36.894	45.660	34.731		4.37	76.49	2.34	31.50	0.00			2173	25222255
13	2502.9	2.461	2.452	27.773	36.959	45.735	34.780		4.71	72.70	2.16	29.50	0.00	0.014	0.014	2469	25222222
12	2805.6	2.276	2.261	27.806	37.003	45.789	34.799		4.80	73.05	2.15	29.30	0.00			2765	25222255
11	3107.1	2.014	1.774	27.827	37.040	45.841	34.797	34.794	4.99	78.76	2.10	29.10	0.00			3060	22222255
10	3406.4	1.709	1.688	27.839	37.070	45.889	34.782		5.04	87.95	2.23	29.60	0.00			3353	25222255
9	3606.1	1.369	1.350	27.845	37.097	45.934	34.759		5.07	98.52	2.24	30.40	0.01			3548	25222255
8	3807.6	1.057	0.770	27.847	37.118	45.973	34.735	34.736	5.09	107.87	2.29	31.30	0.00	0.001		3744	22222225
7	4009.4	0.863	0.561	27.849	37.132	45.999	34.721	34.722	5.09	114.30	2.28	31.90	0.01			3941	22222255
6	4200.3	0.708	0.448	27.849	37.139	46.012	34.713	34.713	5.09	118.98	2.29	32.10	0.00			4136	22222255
5	4420.5	0.682	0.341	27.850	37.146	46.025	34.706	34.705	5.12	120.22	2.29	32.40	0.02	0.007		4341	22222225

CRUISE: CD 29 STA: 28 DATE (D/M/Y): 20-11-87 TIME: 2304 LAT: 32 59.87 S LONG: 43 2.46 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79427E-04 1/S SOUND SPEED= 1499.7 M/S Depth= 2331 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	20.277	-9.000	5.67	20.277	-8.598	0.409	9.015	0.000	0.0	-0.14	0.000	0.00	0.000	0.0
1	20.277	-9.000	5.67	20.277	-8.598	0.409	9.015	0.036	0.0	-0.28	0.000	0.00	0.000	1.0
20	20.306	35.553	5.62	20.302	25.104	33.538	41.610	0.140	0.1	-6.38	3.006	-310.87	3.548	20.0
30	19.810	35.617	5.70	19.805	25.285	33.733	41.810	0.168	0.1	-83.79	2.155	-1843.05	0.638	29.9
40	19.434	35.619	5.58	19.427	25.386	33.846	41.942	0.194	0.2	-5.64	0.428	-139.55	2.377	39.9
50	19.352	35.618	5.68	19.343	25.487	33.869	41.967	0.220	0.4	-32.12	-1.644	-549.62	4.717	49.8
100	17.476	35.618	5.37	17.459	25.879	34.402	42.557	0.334	1.2	-14.51	-0.214	-263.07	3.264	99.6
125	17.134	35.611	5.29	17.113	25.958	34.492	42.658	0.387	1.8	-15.12	-0.757	-232.72	3.070	124.4
150	16.809	35.598	5.30	16.785	26.026	34.572	42.748	0.438	2.5	-8.66	-0.144	-158.05	2.530	149.2
200	16.401	35.588	5.44	16.368	26.116	34.676	42.865	0.538	4.3	-7.40	-0.356	-114.62	2.154	198.9
250	15.908	35.543	5.32	15.868	26.196	34.774	42.980	0.634	6.5	-11.43	-1.132	-139.50	2.377	248.6
300	15.339	35.489	5.14	15.293	26.285	34.884	43.109	0.727	9.1	-12.69	-1.090	-160.36	2.548	298.2
350	14.740	35.435	5.11	14.687	26.377	34.998	43.245	0.817	12.1	-8.55	-0.532	-117.13	2.178	347.9
400	14.448	35.419	5.27	14.388	26.429	35.061	43.318	0.903	15.4	-9.20	-1.259	-82.75	1.830	397.5
450	13.982	35.350	5.25	13.917	26.476	35.126	43.401	0.988	19.1	-8.94	-1.293	-74.16	1.733	447.1
500	13.451	35.273	5.28	13.379	26.528	35.200	43.494	1.071	23.1	-11.99	-1.743	-95.00	1.961	496.7
600	12.429	35.119	5.19	12.348	26.615	35.328	43.661	1.232	32.1	-9.68	-1.417	-69.45	1.677	595.8
700	11.392	34.976	5.09	11.301	26.702	35.459	43.833	1.387	42.4	-10.94	-1.354	-87.26	1.880	694.9
800	10.095	34.818	5.00	9.999	26.811	35.624	44.050	1.533	53.6	-12.87	-1.472	-100.37	2.016	793.9
900	9.032	34.707	4.94	8.930	26.900	35.761	44.232	1.671	65.5	-11.87	-1.142	-95.80	1.969	892.9
1000	7.888	34.601	4.79	7.783	26.993	35.907	44.427	1.799	77.9	-10.40	-0.810	-87.15	1.878	991.8
1200	5.039	34.423	4.59	4.937	27.225	36.277	44.928	2.018	102.4	-6.77	-0.119	-69.42	1.676	1189.4
1400	4.159	34.444	4.37	4.048	27.339	36.436	45.128	2.202	126.8	-5.06	0.235	-68.85	1.670	1386.9
1600	3.285	34.525	4.19	3.165	27.491	36.633	45.367	2.359	150.7	-2.32	0.421	-50.34	1.428	1584.1
1800	2.956	34.608	4.12	2.823	27.588	36.747	45.498	2.493	173.9	-1.58	0.415	-42.29	1.308	1781.1
2000	2.714	34.668	4.22	2.567	27.659	36.830	45.592	2.610	196.6	-0.88	0.298	-27.68	1.059	1977.9
2200	2.530	34.743	4.41	2.368	27.736	36.917	45.688	2.717	219.4	-1.31	0.431	-40.95	1.288	2174.5
2337	2.393	34.776	4.61	2.220	27.775	36.963	45.742	2.781	234.3	-1.01	0.164	-40.95	0.000	2309.1

BOTL NO.	PRES DBAR	CTDMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALI
15	9.7	20.152	20.150	25.142	33.581	41.657	35.549	35.558	5.30	1.61	0.19	0.10	0.00			9	222222255
14	104.2	17.296	17.278	25.922	34.451	42.611	35.617	35.620	5.23	2.81	0.35	1.90	0.04			103	222222255
13	200.9	16.339	16.306	26.129	34.692	42.883	35.587	35.585	5.40	2.98	0.37	2.60	0.03			199	222222255
12	303.1	15.217	15.170	26.311	34.915	43.144	35.488	35.481	5.19	3.51	0.53	5.50	0.02			300	222222255
11	500.9	13.564	13.492	26.502	35.170	43.460	35.270	35.289	5.24	4.19	0.73	8.60	0.01			496	222222255
10	748.1	10.931	10.836	26.742	35.519	43.911	34.918	34.915	5.07	6.24	1.15	14.90	0.02			741	222222255
8	1102.7	6.140	6.037	27.143	36.140	44.739	34.487	34.486	4.66	25.64	2.00	27.70	0.00			1091	222222255
7	1199.4	5.145	5.042	27.213	36.260	44.906	34.423	34.424	4.64	32.44	2.14	30.00	0.02			1186	222222255
5	1598.6	3.335	3.215	27.486	36.625	45.357	34.525	34.514	4.16	61.51	2.45	33.70	0.02			1580	222222255
4	1798.4	2.991	2.858	27.586	36.743	45.491	34.609	34.586	4.10	69.67	2.40	33.60	0.01			1776	222222255
3	2003.0	2.720	2.572	27.658	36.829	45.591	34.667	34.665	4.22	74.93	2.35	32.50	0.01			1978	222222255
2	2201.5	2.533	2.370	27.736	36.917	45.689	34.744	34.746	4.43	75.77	2.22	31.00	0.00			2173	222222255
1	2334.6	2.394	2.221	27.774	36.963	45.741	34.776	34.782	4.63	73.56	2.13	29.50	0.01			2303	222222255

CRUISE: CD 29 STA: 29 DATE (D/M/Y): 21-11-87 TIME: 0420 LAT: 32 59.95 S LONG: 43 40.13 E

GRAVITY= 9.7957 M/S CORIOLIS= -.79429E-04 1/S SOUND SPEED= 1509.5 M/S Depth= 906 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.122	35.505	5.75	19.122	25.377	33.848	41.954	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.122	35.505	5.75	19.122	25.377	33.848	41.954	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.126	35.534	5.53	19.123	25.399	33.870	41.976	0.052	0.1	-12.34	11.284	-917.79	6.096	19.9
30	18.761	35.636	5.55	18.756	25.571	34.052	42.167	0.077	0.1	-35.82	2.081	-833.16	5.808	29.8
40	18.518	35.644	5.54	18.511	25.639	34.127	42.250	0.101	0.2	-25.05	-0.061	-486.38	4.447	39.0
50	18.302	35.641	5.54	18.373	25.671	34.164	42.291	0.124	0.3	-11.84	-0.362	-210.01	2.916	49.7
100	17.123	35.615	5.37	17.106	25.962	34.497	42.663	0.234	1.1	-17.36	-0.487	-297.19	3.469	99.4
125	16.742	35.597	5.24	16.721	26.040	34.588	42.766	0.285	1.7	-13.78	-0.870	-214.60	2.948	124.3
150	16.553	35.584	5.15	16.528	26.075	34.630	42.814	0.334	2.4	-5.90	-0.332	-86.15	1.868	149.1
200	16.108	35.547	5.11	16.076	26.152	34.723	42.922	0.432	4.2	-6.16	-0.516	-81.36	1.815	198.8
250	15.614	35.499	5.07	15.575	26.229	34.818	43.034	0.527	6.3	-13.51	-1.346	-160.71	2.551	248.5
300	15.105	35.454	5.00	15.059	26.310	34.917	43.151	0.618	8.9	-8.25	-0.658	-105.32	2.065	298.1
350	14.544	35.400	5.03	14.491	26.393	35.021	43.275	0.706	11.8	-8.74	-0.894	-97.54	1.987	347.7
400	14.043	35.338	5.04	13.985	26.452	35.100	43.372	0.792	15.1	-8.92	-1.014	-90.93	1.919	397.4
450	13.735	35.302	5.11	13.670	26.490	35.151	43.434	0.876	18.8	-6.67	-0.846	-61.44	1.577	447.0
500	13.172	35.224	5.14	13.102	26.546	35.229	43.534	0.959	22.8	-10.11	-1.435	-80.96	1.810	496.5
600	12.184	35.084	5.11	12.104	26.635	35.358	43.701	1.118	31.7	-12.39	-1.645	-95.70	1.968	595.7
700	10.950	34.926	5.00	10.862	26.744	35.519	43.911	1.268	41.6	-9.18	-1.119	-70.02	1.684	694.0
800	9.751	34.789	4.93	9.657	26.845	35.674	44.114	1.411	52.5	-13.03	-1.394	-102.45	2.037	793.0
900	8.731	34.685	4.85	8.631	26.930	35.805	44.280	1.544	64.0	-5.52	-0.522	-102.45	0.000	892.7
909	8.720	34.684	4.84	8.620	26.931	35.806	44.290	1.555	65.1	-4.33	-0.396	-102.45	0.000	901.7

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUAL1
11	0.0	19.162	19.162	24.740	33.220	41.334	34.685	35.486	5.40	1.60	0.21	0.00	-0.01				0	222222255
10	55.3	18.185	18.176	25.719	34.218	42.351	35.639	35.631	5.50	1.78	0.25	0.00	-0.01				54	222222255
9	102.7	16.957	16.940	26.002	34.542	42.713	35.615	35.600	5.25	2.81	0.38	2.30	0.03				101	222222255
8	202.9	16.060	16.028	26.161	34.734	42.935	35.545	35.541	5.04	3.60	0.50	4.70	0.01				201	222222255
7	304.1	14.935	14.889	26.343	34.957	43.197	35.449	35.441	4.96	3.85	0.63	6.70	0.01				301	222222255
6	399.7	13.997	13.939	26.462	35.112	43.385	35.338	35.347	5.04	4.03	0.73	8.00	0.01				396	222222255
5	500.5	13.095	13.025	26.562	35.248	43.555	35.224	35.210	5.37	4.37	0.86	10.00	0.00				496	222222255
4	601.9	12.137	12.056	26.643	35.369	43.713	35.083	35.072	5.06	5.06	1.02	12.30	0.01				596	222222255
3	698.9	10.905	10.817	26.752	35.530	43.923	34.927	34.917	4.99	6.94	1.10	15.90	-0.01				692	222222255
2	796.5	9.782	9.680	26.843	35.670	44.109	34.793	34.787	4.92	9.34	1.39	18.20	0.00				788	222222255
1	908.7	8.666	8.566	26.940	35.818	44.304	34.685	34.674	4.80	13.27	1.56	21.30	0.00				899	222222255

CRUISE: CD 29 STA: 30 DATE (D/M/Y): 21-11-87 TIME: 0911 LAT: 32 59.64 S LONG: 44 29.41 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79418E-04 1/S SOUND SPEED= 1507.6 M/S Depth= 964 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S I/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.777	35.558	5.19	19.777	25.247	33.697	41.784	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.777	35.558	5.19	19.777	25.247	33.697	41.784	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.206	35.558	5.17	19.203	25.397	33.865	41.968	0.053	0.1	-24.91	4.549	-769.22	5.581	19.9
30	18.854	35.622	5.17	18.848	25.537	34.015	42.127	0.078	0.1	-18.41	2.100	-490.35	4.456	29.8
40	18.635	35.633	5.24	18.628	25.601	34.086	42.205	0.103	0.2	-32.76	-0.599	-609.47	4.960	39.8
50	18.364	35.625	5.24	18.355	25.664	34.157	42.285	0.126	0.3	-15.75	-0.285	-290.71	3.431	49.7
100	17.495	35.617	5.09	17.478	25.873	34.396	42.550	0.238	1.2	-14.67	-0.029	-276.40	3.345	99.5
125	17.039	35.605	5.12	17.019	25.975	34.513	42.682	0.291	1.8	-15.55	-0.797	-252.64	3.198	124.3
150	16.750	35.601	5.14	16.725	26.042	34.590	42.767	0.342	2.5	-14.45	-0.773	-225.23	3.020	149.1
200	16.216	35.559	5.07	16.184	26.136	34.703	42.899	0.440	4.2	-7.91	-0.708	-102.02	2.032	198.8
250	15.712	35.511	4.97	15.672	26.217	34.802	43.015	0.535	6.4	-17.31	-1.727	-206.61	2.892	248.5
300	14.923	35.437	4.97	14.877	26.337	34.951	43.191	0.626	9.0	-12.61	-1.148	-151.35	2.476	298.1
350	14.289	35.368	4.99	14.237	26.422	35.061	43.324	0.713	11.8	-9.41	-1.084	-95.91	1.971	347.8
400	13.728	35.299	5.09	13.671	26.488	35.148	43.432	0.797	15.1	-8.68	-1.060	-81.88	1.821	397.4
450	13.284	35.239	5.08	13.221	26.534	35.212	43.512	0.879	18.6	-10.51	-1.430	-87.56	1.883	447.0
500	12.806	35.175	5.04	12.737	26.582	35.280	43.598	0.960	22.5	-13.00	-1.788	-102.90	2.041	496.5
600	11.598	35.008	5.03	11.521	26.687	35.434	43.900	1.114	31.2	-11.87	-1.595	-86.39	1.870	595.7
700	10.187	34.835	4.95	10.103	26.806	35.615	44.037	1.259	40.8	-14.18	-1.562	-111.78	2.127	694.8
800	8.988	34.711	4.83	8.898	26.909	35.771	44.243	1.394	51.1	-10.30	-0.966	-82.27	1.825	793.8
900	7.980	34.619	4.77	7.886	26.992	35.900	44.416	1.520	62.0	-8.28	-0.706	-65.59	1.630	892.7
959	7.587	34.586	4.70	7.489	27.024	35.951	44.485	1.591	68.8	-7.67	-0.633	-65.59	0.000	951.1

BOTL NO.	PRES DBAR	CTD TMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
11	1.4	19.871	19.871	24.481	32.940	41.035	34.586	35.557	5.39	1.67	0.12	0.00	0.00	1.996	0.000	1	222222222
10	55.0	18.371	18.362	25.662	34.155	42.282	35.625	35.626	5.45	1.85	0.21	0.00	0.00	2.033	1.161	54	222222222
9	153.0	16.437	16.413	26.115	34.673	42.861	35.600	35.573	5.16	3.42	0.39	3.70	0.00	2.100	1.135	151	222222222
8	254.9	15.499	15.460	26.253	34.846	43.066	35.496	35.488	5.05	3.77	0.50	5.50	0.00	2.036	1.181	252	222222222
7	351.1	14.245	14.194	26.431	35.071	43.336	35.368	35.363	5.04	4.13	0.64	7.80	0.00	1.971	1.070	348	222222222
6	458.6	13.373	13.308	26.512	35.187	43.483	35.233	35.252	5.08	4.48	0.77	9.30	0.00	1.876	1.031	454	222222222
5	549.6	12.316	12.274	26.619	35.337	43.674	35.098		5.05	5.01	0.95	11.70	0.00	1.593	0.885	544	252222222
4	650.1	10.998	10.916	26.734	35.508	43.897	34.927	34.928	5.02	6.40	1.14	14.90	0.00	1.303	0.720	644	222222222
3	733.8	9.771	9.685	26.839	35.667	44.106	34.787	34.786	4.92	9.52	1.34	18.20	0.00	1.014	0.538	726	222222222
2	850.3	8.404	8.313	26.959	35.848	44.345	34.659	34.653	4.80	14.53	1.59	22.10	0.00	0.828	0.483	842	222222222
1	958.7	7.572	7.474	27.026	35.954	44.488	34.586	34.582	4.75	18.34	1.79	24.30	0.00	0.686	0.415	949	222222222

CRUISE: CD 29 STA: 31 DATE (D/M/Y): 21-11-87 TIME: 1815 LAT: 33 12.41 S LONG: 46 4.79 E

GRAVITY= 9.7958 M/S CORIOLIS= -.79872E-04 1/S SOUND SPEED= 1496.5 M/S Depth= 2196 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.735	35.543	5.12	18.735	25.505	33.987	42.104	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.735	35.543	5.12	18.735	25.505	33.988	42.104	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.496	35.508	5.33	18.493	25.539	34.030	42.154	0.050	0.1	-2.29	2.900	-218.00	2.968	19.9
30	18.368	35.540	5.40	18.363	25.596	34.091	42.219	0.074	0.1	-122.81	5.004	-2683.02	10.395	29.8
40	17.123	35.548	5.58	17.116	25.908	34.443	42.609	0.096	0.2	-46.18	-1.622	-770.46	5.570	39.8
50	16.849	35.550	5.60	16.841	25.976	34.520	42.695	0.117	0.3	-21.93	-0.797	-359.94	3.807	49.7
100	15.797	35.499	5.39	15.781	26.183	34.764	42.974	0.214	1.0	-14.87	-0.445	-241.21	3.116	99.4
125	15.579	35.505	5.17	15.559	26.237	34.827	43.043	0.260	1.6	-8.71	-0.406	-135.09	2.332	124.3
150	15.424	35.492	5.18	15.401	26.263	34.858	43.080	0.305	2.2	-5.56	-0.503	-60.80	1.565	149.1
200	15.246	35.498	5.24	15.216	26.309	34.911	43.139	0.394	3.8	-5.10	-0.433	-63.69	1.601	198.0
250	14.739	35.420	5.11	14.701	26.362	34.983	43.230	0.482	5.8	-13.52	-2.004	-113.97	2.142	248.4
300	14.148	35.342	5.06	14.104	26.430	35.074	43.342	0.567	8.2	-8.96	-0.694	-110.67	2.111	298.1
350	13.768	35.309	5.09	13.718	26.486	35.145	43.426	0.650	10.9	-5.15	-0.352	-65.12	1.619	347.7
400	13.460	35.276	5.15	13.403	26.525	35.196	43.489	0.731	14.0	-7.59	-1.074	-61.34	1.572	397.3
450	12.987	35.206	5.09	12.925	26.568	35.258	43.569	0.812	17.5	-12.04	-1.884	-82.62	1.824	446.9
500	12.417	35.116	5.06	12.349	26.612	35.326	43.659	0.890	21.3	-9.45	-1.436	-64.15	1.607	496.5
600	11.347	34.963	5.03	11.270	26.698	35.437	43.832	1.042	29.9	-11.52	-1.492	-85.00	1.856	595.6
700	10.143	34.818	4.92	10.060	26.800	35.611	44.035	1.187	39.4	-12.26	-1.355	-95.48	1.961	694.7
800	8.719	34.671	4.78	8.631	26.919	35.794	44.278	1.322	49.7	-16.19	-1.528	-127.34	2.264	793.7
900	7.080	34.524	4.70	6.991	27.045	35.997	44.552	1.444	60.3	-17.94	-1.426	-136.54	2.345	892.6
1000	5.833	34.441	4.71	5.743	27.143	36.155	44.768	1.553	70.9	-10.54	-0.572	-86.45	1.866	991.5
1200	4.177	34.404	4.56	4.083	27.304	36.400	45.091	1.746	92.4	-6.17	0.214	-78.55	1.778	1189.2
1400	3.413	34.485	4.21	3.310	27.445	36.580	45.308	1.906	113.7	-2.76	0.491	-58.50	1.535	1386.6
1600	2.979	34.588	4.08	2.863	27.568	36.725	45.474	2.042	134.5	-2.00	0.504	-51.59	1.441	1583.8
1800	2.724	34.682	4.21	2.594	27.667	36.837	45.598	2.157	154.3	-0.71	0.327	-27.56	1.053	1780.7
2000	2.593	34.732	4.40	2.447	27.720	36.897	45.664	2.260	174.3	-0.89	0.222	-23.27	0.968	1977.5
2200	2.442	34.774	4.59	2.281	27.768	36.953	45.728	2.355	194.7	-0.87	0.226	-23.27	0.000	2174.1

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
15	11.3	18.547	18.545	25.498	33.987	42.111	35.471	35.560	5.49	1.81	0.21	0.00	0.01	2.188	0.000	11	22222222	
14	106.6	15.694	15.678	26.209	34.794	43.007	35.503	35.520	5.43	3.18	0.41	3.30	0.30	2.227	1.363	105	22222222	
13	204.5	15.116	15.085	26.334	34.940	43.173	35.493	35.467	5.34	3.53	0.54	5.30	0.03	2.224	1.239	202	22222222	
12	304.5	14.157	14.113	26.428	35.071	43.338	35.341	35.345	5.15	4.05	0.69	7.60	0.02	2.046	1.148	301	22222222	
11	404.2	13.523	13.465	26.510	35.178	43.469	35.272	35.288	5.26	4.07	0.74	8.50	0.02	2.039	1.170	400	22222222	
10	501.8	12.503	12.435	26.594	35.304	43.634	35.114	35.134	5.14	4.92	0.93	11.20	0.02	1.808	1.020	497	22222222	
9	602.0	11.521	11.443	26.665	35.417	43.786	34.962	34.989	5.05	5.45	1.09	13.70	-0.02	1.512	0.827	596	22222222	
8	803.7	8.855	8.766	26.893	35.762	44.240	34.665	34.686	4.82	11.77	1.55	20.80	0.01	0.919	0.536	795	22222222	
5	1403.3	3.372	3.269	27.450	36.587	45.317	34.486	34.502	4.20	57.94	2.51	33.50	-0.01	0.248	0.128	1387	22222222	
4	1601.4	2.981	2.865	27.569	36.725	45.474	34.588	34.590	4.11	67.65	2.51	33.50	-0.01	0.076	0.055	1583	22222222	
3	1802.5	2.725	2.595	27.669	36.839	45.600	34.684	34.635	4.16	69.87	2.40	32.70	-0.01			1781	22222255	
1	2200.2	2.441	2.279	27.768	36.953	45.729	34.774	34.771	4.66	68.35	2.13	29.10	-0.01	0.000		2171	22222225	

CRUISE: CD 29 STA: 32 DATE (D/M/Y): 21-11-87 TIME: 2227 LAT: 33 18.70 S LONG: 46 30 25 E

GRAVITY= 9.7959 M/S CORIOLIS= -.80095E-04 1/S SOUND SPEED= 1497.0 M/S Depth= 2660 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.349	35.483	5.28	19.349	25.302	33.766	41.866	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.349	35.483	5.28	19.349	25.302	33.766	41.866	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.799	35.525	5.51	18.796	25.476	33.957	42.072	0.051	0.1	-22.33	4.198	-696.93	5.290	19.9
30	18.501	35.568	5.52	18.496	25.585	34.074	42.198	0.076	0.1	-41.38	4.939	-1113.44	6.686	29.8
40	18.068	35.600	5.55	18.061	25.718	34.221	42.358	0.099	0.2	-25.64	-1.013	-439.10	4.199	39.8
50	17.424	35.582	5.63	17.416	25.862	34.387	42.543	0.122	0.3	-80.51	-0.053	-1532.97	7.845	49.7
100	16.250	35.564	5.36	16.234	26.128	34.693	42.887	0.222	1.1	-19.20	-1.102	-285.13	3.383	99.4
125	15.823	35.534	5.21	15.803	26.204	34.785	42.993	0.269	1.6	-15.54	-1.408	-196.26	2.807	124.3
150	15.525	35.508	5.05	15.501	26.253	34.844	43.063	0.314	2.2	-9.27	-0.587	-129.90	2.284	149.1
200	15.016	35.462	5.13	14.986	26.332	34.942	43.179	0.403	3.8	-12.02	-1.356	-129.22	2.278	198.8
250	14.503	35.406	5.14	14.466	26.402	35.032	43.286	0.489	5.8	-11.22	-1.201	-120.76	2.202	248.4
300	13.991	35.343	5.15	13.948	26.464	35.114	43.387	0.572	8.1	-8.40	-1.053	-78.39	1.774	298.1
350	13.587	35.292	5.19	13.537	26.510	35.175	43.463	0.654	10.8	-6.57	-0.808	-60.73	1.562	347.7
400	13.268	35.251	5.26	13.212	26.545	35.223	43.524	0.734	13.9	-6.02	-0.864	-47.30	1.378	397.3
450	12.902	35.192	5.27	12.840	26.575	35.268	43.582	0.814	17.4	-10.60	-1.708	-69.38	1.669	446.9
500	12.406	35.114	5.15	12.339	26.613	35.327	43.660	0.892	21.2	-10.43	-1.581	-71.03	1.689	496.5
600	11.271	34.953	5.08	11.194	26.704	35.466	43.844	1.044	29.7	-11.47	-1.461	-86.42	1.863	595.6
700	10.003	34.802	4.93	9.920	26.811	35.628	44.058	1.188	39.2	-13.28	-1.471	-101.95	2.023	694.7
800	8.572	34.656	4.80	8.485	26.930	35.812	44.302	1.322	49.4	-17.02	-1.552	-133.97	2.319	793.7
900	6.953	34.526	4.68	6.905	27.059	36.014	44.574	1.442	59.8	-13.27	-1.042	-101.50	2.019	892.6
1000	5.804	34.438	4.67	5.714	27.145	36.158	44.772	1.552	70.4	-12.94	-0.807	-100.31	2.007	991.5
1200	4.020	34.399	4.56	3.928	27.316	36.420	45.119	1.742	91.8	-5.89	0.234	-76.37	1.751	1189.2
1400	3.291	34.481	4.30	3.189	27.454	36.595	45.329	1.901	112.8	-2.48	0.478	-54.93	1.485	1386.6
1600	2.905	34.574	4.16	2.790	27.564	36.725	45.477	2.036	133.4	-1.48	0.504	-46.31	1.364	1583.8
1800	2.760	34.672	4.21	2.629	27.656	36.824	45.583	2.153	153.6	-0.53	0.403	-30.41	1.105	1780.7
2000	2.650	34.739	4.40	2.503	27.721	36.895	45.659	2.257	173.9	-0.66	0.263	-23.38	0.969	1977.5
2200	2.537	34.779	4.62	2.374	27.764	36.944	45.715	2.353	194.4	-0.82	0.100	-15.28	0.783	2174.1
2400	2.393	34.799	4.80	2.215	27.793	36.982	45.760	2.444	215.6	-1.00	0.060	-15.02	0.777	2370.6
2600	2.222	34.803	4.89	2.028	27.812	37.010	45.798	2.530	237.6	-0.86	0.014	-15.02	0.000	2566.8
2673	2.160	34.802	4.93	1.960	27.816	37.019	45.810	2.561	245.9	-1.03	-0.011	-15.02	0.000	2638.4

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
22	12.9	18.784	18.782	25.469	33.950	42.066	35.511	35.532	5.48	2.07	0.20	0.10	0.02			12	222222255
21	12.9	18.784	18.782	25.469	33.950	42.066	35.511	35.532	5.47	2.10	0.23	0.00	0.01			12	222222255
20	53.0	16.953	16.944	25.975	34.515	42.686	35.581	35.587	5.76	2.60	0.26	0.00	0.01			52	222272255
19	253.6	14.465	14.428	26.407	35.039	43.294	35.402	35.399	5.15							251	222555555
18	253.6	14.465	14.428	26.407	35.039	43.294	35.402	35.399	5.14	4.14	0.64	7.00	0.01			251	222222255
17	352.1	13.648	13.598	26.497	35.160	43.446	35.291	35.297	5.22	4.31	0.74	8.40	0.00			349	222222255
16	451.3	12.909	12.846	26.572	35.266	43.580	35.191	35.193	5.23	4.66	0.88	9.90	0.01			447	222222255
15	552.3	11.716	11.644	26.674	35.417	43.777	35.022	35.028	5.08							547	222555555
13	748.3	9.241	9.156	26.881	35.732	44.193	34.729	34.723	4.89	10.48	1.47	19.70	0.01			741	222222255
11	950.2	6.357	6.268	27.108	36.095	44.683	34.481	34.483	4.74							940	222555555
10	1023.7	5.454	5.385	27.173	36.204	44.834	34.420	34.416	4.77	27.59	2.08	29.30	0.00			1013	222222255
8	1296.1	3.586	3.490	27.388	36.514	45.234	34.435	34.438	4.43	50.86	2.37	33.50	0.01			1282	222222255
7	1499.1	3.068	2.960	27.510	36.663	45.408	34.526	34.533	4.16	64.39	2.40	34.20	0.01			1482	222222255
6	1703.5	2.784	2.661	27.620	36.787	45.545	34.630	34.649	4.17	69.69	2.32	32.60	0.01			1683	222222255
2	2499.2	2.283	2.096	27.804	36.999	45.783	34.800	34.799	4.90	70.55	1.95	28.60	0.01			2465	222222255
1	2672.2	2.161	1.961	27.816	37.019	45.810	34.802	34.809	4.95	67.14	1.82	27.50	0.01			2634	222222255

CRUISE: CD 29 STA: 33 DATE (D/M/Y): 22-11-87 TIME: 0302 LAT: 33 22.78 S LONG: 46 54 98 E

GRAVITY= 9.7960 M/S CORIOLIS= -.80240E-04 1/S SOUND SPEED= 1498.1 M/S Depth= 3147 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	PTS68	PSS78	ML/L	PTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.899	35.563	5.20	18.899	25.479	33.956	42.068	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.899	35.563	5.20	18.899	25.479	33.956	42.068	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.794	35.555	5.41	18.790	25.500	33.981	42.096	0.050	0.1	-9.11	-1.036	-120.10	2.194	19.9
30	18.751	35.555	5.39	18.746	25.512	33.994	42.110	0.075	0.1	-26.53	1.838	-639.09	5.061	29.8
40	18.246	35.571	5.51	18.239	25.651	34.149	42.281	0.099	0.2	-86.52	-1.055	-1627.45	8.076	39.8
50	17.130	35.566	5.65	17.122	25.921	34.456	42.621	0.121	0.3	-50.10	1.210	-1172.11	6.854	49.7
100	16.155	35.563	5.30	16.139	26.150	34.718	42.915	0.219	1.1	-19.33	-1.236	-278.41	3.340	99.4
125	15.662	35.521	5.17	15.642	26.231	34.817	43.031	0.266	1.6	-14.37	-1.072	-203.65	2.857	124.3
150	15.387	35.500	5.11	15.364	26.278	34.874	43.097	0.311	2.2	-11.87	-0.916	-156.56	2.505	149.1
200	14.925	35.452	5.09	14.894	26.345	34.958	43.198	0.399	3.8	-10.29	-1.162	-109.76	2.097	198.8
250	14.420	35.399	5.09	14.383	26.415	35.047	43.305	0.484	5.7	-9.47	-0.997	-102.68	2.029	248.4
300	13.960	35.341	5.12	13.916	26.469	35.120	43.394	0.567	8.1	-10.14	-1.289	-93.46	1.935	298.1
350	13.569	35.293	5.18	13.519	26.515	35.181	43.469	0.648	10.8	-5.45	-0.595	-55.08	1.486	347.7
400	13.248	35.249	5.27	13.184	26.549	35.229	43.538	0.729	13.8	-0.85	-1.330	-65.59	1.621	397.3
450	12.744	35.168	5.19	12.682	26.587	35.287	43.607	0.808	17.3	-9.17	-1.465	-60.09	1.552	446.9
500	12.175	35.080	5.08	12.108	26.631	35.354	43.697	0.885	21.0	-11.81	-1.754	-80.84	1.800	496.5
600	11.118	34.934	5.08	11.042	26.717	35.485	43.869	1.035	29.4	-10.85	-1.360	-81.24	1.804	595.6
700	9.739	34.773	4.99	9.657	26.833	35.661	44.102	1.177	38.8	-14.56	-1.555	-113.20	2.130	694.7
800	8.406	34.642	4.78	8.320	26.944	35.833	44.330	1.308	48.8	-13.38	-1.189	-104.90	2.050	793.7
900	6.893	34.515	4.72	6.806	27.064	36.024	44.588	1.428	59.2	-14.99	-1.113	-116.77	2.163	892.6
1000	5.561	34.429	4.70	5.474	27.167	36.193	44.818	1.535	69.6	-10.46	-0.571	-85.16	1.847	991.5
1200	4.079	34.405	4.57	3.986	27.314	36.415	45.111	1.724	90.7	-5.93	0.160	-72.33	1.703	1189.1
1400	3.262	34.487	4.22	3.160	27.461	36.604	45.339	1.883	111.7	-3.10	0.467	-60.52	1.557	1386.5
1600	2.840	34.580	4.16	2.726	27.574	36.739	45.494	2.015	132.0	-1.50	0.379	-38.95	1.249	1583.7
1800	2.638	34.639	4.22	2.509	27.640	36.815	45.581	2.132	152.2	-1.10	0.272	-28.31	1.065	1780.7
2000	2.489	34.697	4.35	2.345	27.700	36.884	45.657	2.238	172.7	-0.73	0.266	-24.28	0.986	1977.5
2200	2.514	34.766	4.57	2.351	27.756	36.937	45.709	2.335	193.5	-0.13	0.274	-18.31	0.857	2174.1
2400	2.484	34.794	4.74	2.225	27.788	36.977	45.754	2.427	215.0	-0.54	0.122	-13.69	0.741	2370.5
2600	2.163	34.788	4.81	1.970	27.804	37.006	45.797	2.514	237.3	-1.36	0.002	-15.87	0.797	2566.8
2800	1.993	34.794	4.88	1.784	27.824	37.036	45.837	2.597	260.1	-0.40	0.053	-7.95	0.565	2762.8
3000	1.837	34.778	4.92	1.613	27.824	37.046	45.855	2.678	284.1	-1.57	-0.176	-8.12	0.571	2958.7
3187	1.579	34.752	4.72	1.342	27.823	37.061	45.885	2.753	307.6	-1.40	-0.135	-8.12	0.000	3141.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	PTS68	PTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	1.7	19.069	19.069	24.815	33.297	41.413	34.752	35.577	5.39	1.91	0.20	0.10	0.00	1.989	1.232	1	222222222
23	54.0	17.347	17.338	25.873	34.401	42.560	35.572	35.580	5.63	2.08	0.23	0.10	-0.01	2.353	1.347	53	222222222
22	153.7	15.374	15.350	26.279	34.876	43.099	35.498	35.496	5.00	3.28	0.52	5.10	0.00	2.082	1.293	152	222222222
21	252.1	14.308	14.271	26.436	35.073	43.335	35.396	35.382	5.14	3.45	0.63	7.20	0.00	2.093	1.190	250	222222222
20	352.0	13.446	13.396	26.539	35.210	43.503	35.292	35.276	5.19	3.46	0.72	8.70	0.00	1.990	1.268	349	222222222
19	453.2	12.600	12.538	26.614	35.320	43.645	35.166	35.142	5.12	4.13	0.89	10.90	0.00	1.805	1.067	449	222222222
18	551.2	11.521	11.449	26.698	35.449	43.817	35.006	34.983	5.00	5.84	1.06	13.80	0.00	1.548	0.935	546	222222222
16	751.7	9.175	9.090	26.868	35.722	44.187	34.699	34.711	4.81	10.42	1.44	20.00	0.00	0.937	0.540	744	222222222
14	952.9	6.093	6.006	27.133	36.132	44.732	34.469	34.458	4.74	23.65	2.01	27.80	0.00	0.673	0.430	943	222222222
13	1025.8	5.276	5.188	27.194	36.233	44.872	34.420	34.419	4.69	29.59	2.13	29.60	0.00	0.597	0.338	1015	222222222
12	1099.7	4.721	4.631	27.249	36.318	44.981	34.409	34.407	4.61	35.86	2.23	31.00	0.00			1088	222222255
11	1300.8	3.587	3.584	27.394	36.520	45.240	34.443		4.32							1206	252555555
10	1500.7	3.034	2.926	27.520	36.674	45.421	34.534	34.525	4.14	64.17	2.45	34.10	0.01	0.110	0.082	1483	222222222
9	1701.7	2.743	2.621	27.609	36.778	45.539	34.611	34.603	4.14	71.97	2.39	33.60	0.01			1681	222222255
8	1899.0	2.525	2.389	27.671	36.852	45.623	34.664	34.666	4.20	76.71	2.33	32.80	0.01			1875	222222255
7	2101.0	2.438	2.286	27.724	36.910	45.686	34.720	34.724	4.42	78.40	2.23	31.40	0.01	0.014	0.000	2074	222222222
6	2302.2	2.297	2.129	27.786	36.979	45.762	34.781	34.754	4.57	78.56	2.14	30.50	0.01			2272	222222255
5	2501.4	2.236	2.051	27.800	36.998	45.785	34.791	34.784	4.79	75.17	2.06	29.20	0.01			2467	222222255
4	2704.4	2.018	1.818	27.818	37.028	45.827	34.790	34.784	4.90	79.74	2.07	29.10	0.01	0.001		2666	222222225
3	2905.0	1.927	1.710	27.827	37.043	45.848	34.791	34.788	4.95	80.41	2.07	29.10	0.01			2862	222222255
2	3095.9	1.658	1.426	27.821	37.054	45.874	34.758	34.756	4.82	96.16	2.17	30.70	0.00	0.003	0.000	3049	222222222
1	3186.1	1.579	1.342	27.823	37.060	45.885	34.752	34.753	4.73	97.17	2.14	30.90	0.00	0.005		3137	222222225

CRUISE: CD 29 STA: 34 DATE (D/M/Y): 22-11-87 TIME: 0832 LAT: 33 29.94 S LONG: 47 26.84 E

GRAVITY= 9.7961 M/S CORIOLIS= -.80493E-04 1/S SOUND SPEED= 1499.3 M/S Depth= 3591 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.331	35.551	4.48	19.331	25.358	33.822	41.921	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.331	35.551	4.48	19.330	25.358	33.822	41.921	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.552	35.533	5.43	18.549	25.544	34.033	42.155	0.050	0.1	-7.66	0.788	-199.91	2.826	19.9
30	18.463	35.545	5.35	18.458	25.576	34.068	42.193	0.074	0.1	-12.29	1.432	-330.23	3.632	29.8
40	18.352	35.556	5.41	18.345	25.613	34.108	42.236	0.098	0.2	-7.26	0.739	-188.38	2.743	39.8
50	18.183	35.565	5.36	18.174	25.663	34.163	42.296	0.122	0.3	-43.45	0.689	-895.07	5.980	49.7
100	16.513	35.575	5.40	16.496	26.076	34.632	42.817	0.226	1.1	-20.24	-0.849	-325.45	3.606	99.4
125	16.083	35.549	5.29	16.064	26.156	34.727	42.927	0.274	1.6	-17.84	-1.351	-244.79	3.127	124.3
150	15.670	35.517	5.12	15.647	26.227	34.813	43.026	0.321	2.3	-13.93	-1.094	-191.33	2.765	149.1
200	15.002	35.457	4.99	14.972	26.331	34.942	43.179	0.410	3.9	-11.93	-1.136	-141.40	2.377	198.8
250	14.458	35.401	5.03	14.421	26.408	35.039	43.295	0.496	5.9	-11.36	-1.264	-119.82	2.188	248.4
300	13.920	35.335	5.12	13.876	26.473	35.125	43.401	0.579	8.2	-8.65	-1.049	-83.25	1.824	298.1
350	13.601	35.294	5.23	13.551	26.509	35.174	43.461	0.661	10.9	-6.76	-0.897	-58.72	1.532	347.7
400	13.164	35.232	5.21	13.108	26.552	35.235	43.539	0.741	14.0	-10.50	-1.605	-75.78	1.740	397.3
450	12.634	35.148	5.23	12.573	26.594	35.298	43.622	0.820	17.4	-12.42	-1.940	-82.79	1.819	446.9
500	12.036	35.056	5.12	11.969	26.639	35.369	43.716	0.897	21.1	-13.14	-1.899	-91.49	1.912	496.5
600	10.919	34.907	5.05	10.844	26.732	35.509	43.901	1.045	29.4	-12.31	-1.494	-92.89	1.926	595.6
700	9.559	34.752	4.97	9.479	26.847	35.683	44.131	1.185	38.7	-13.60	-1.398	-106.48	2.063	694.7
800	8.067	34.610	4.80	7.983	26.971	35.875	44.387	1.314	48.5	-14.60	-1.297	-111.33	2.109	793.7
900	6.589	34.490	4.71	6.504	27.085	36.068	44.637	1.430	58.6	-13.49	-0.965	-103.84	2.037	892.6
1000	5.380	34.416	4.72	5.293	27.178	36.213	44.847	1.536	68.8	-10.94	-0.479	-93.66	1.934	991.5
1200	3.921	34.409	4.51	3.830	27.334	36.443	45.146	1.720	89.4	-4.34	0.247	-60.80	1.559	1189.1
1400	3.116	34.487	4.24	3.213	27.456	36.596	45.328	1.877	110.2	-2.74	0.443	-55.60	1.490	1386.5
1600	2.904	34.568	4.14	2.788	27.560	36.721	45.473	2.012	130.8	-1.53	0.370	-38.80	1.245	1583.7
1800	2.662	34.634	4.17	2.533	27.634	36.808	45.573	2.131	151.4	-1.07	0.306	-30.16	1.098	1788.7
2000	2.474	34.690	4.32	2.330	27.697	36.881	45.655	2.238	172.2	-1.04	0.221	-24.81	0.996	1977.5
2200	2.283	34.725	4.44	2.124	27.742	36.936	45.720	2.336	193.1	-1.08	0.122	-19.40	0.888	2174.1
2400	2.104	34.738	4.54	1.930	27.767	36.972	45.766	2.427	214.6	-1.00	0.040	-13.68	0.739	2370.5
2600	1.923	34.742	4.56	1.735	27.786	37.002	45.806	2.514	236.8	-0.84	0.027	-11.24	0.670	2566.8
2800	1.845	34.760	4.69	1.639	27.808	37.028	45.837	2.598	259.8	-0.71	0.057	-11.72	0.684	2762.8
3000	1.590	34.744	4.67	1.371	27.814	37.051	45.874	2.679	283.6	-1.19	-0.082	-9.14	0.604	2958.7
3200	1.447	34.742	4.73	1.211	27.823	37.069	45.900	2.756	308.1	-0.73	-0.025	-7.41	0.544	3154.4
3400	1.251	34.722	4.67	1.001	27.822	37.080	45.923	2.832	333.6	-0.95	-0.058	-8.19	0.572	3349.9
3600	1.125	34.716	4.74	0.858	27.826	37.092	45.943	2.905	359.8	-0.58	-0.026	-8.19	0.800	3545.2
3829	1.122	34.716	4.70	0.852	27.827	37.093	45.944	2.916	363.7	-0.48	-0.021	-8.19	0.800	3573.6

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	102.0	16.451	16.434	26.089	34.647	42.834	35.573	35.570	5.48	2.46	0.26	1.00	0.10			101	222222255
23	249.7	14.338	14.302	26.435	35.071	43.331	35.403	35.384	5.10	3.83	0.63	7.40	0.00			247	222222255
22	449.1	12.548	12.487	26.612	35.319	43.647	35.150	35.134	5.15							445	222555555
21	598.8	10.749	10.675	26.762	35.548	43.945	34.907	34.886	4.99	6.73	1.15	15.90	0.00			593	222222255
20	799.3	8.414	8.380	26.920	35.809	44.306	34.612		4.83	13.03	1.54	21.50	-0.01			791	252222255
19	896.8	6.991	6.903	27.033	35.989	44.549	34.493	34.517	4.75	19.49	1.81	25.90	-0.01			868	222222255
18	995.6	5.740	5.652	27.137	36.154	44.771	34.419	34.434	4.74	25.78	2.02	28.70	0.01			985	222222255
16	1397.6	3.258	3.156	27.460	36.603	45.339	34.486	34.505	4.27	58.91	2.40	33.70	0.02			1382	222222255
15	1598.3	2.878	2.763	27.562	36.724	45.478	34.568	34.589	4.16	67.50	2.35	33.60	0.03			1579	222222255
14	1796.8	2.655	2.526	27.634	36.809	45.573	34.633	34.635	4.16	75.90	2.35	33.60	0.02			1775	222222255
13	1998.8	2.461	2.318	27.697	36.882	45.657	34.690	34.690	4.34	78.61	2.28	32.70	0.03			1974	222222255
12	2198.2	2.279	2.121	27.742	36.937	45.721	34.725	34.724	4.45	82.69	2.23	31.90	0.03			2169	222222255
11	2402.2	2.097	1.923	27.767	36.973	45.767	34.737	34.738	4.54	87.10	2.26	31.40	0.02			2370	222222255
10	2600.2	1.917	1.728	27.787	37.003	45.807	34.743	34.743	4.61	93.21	2.24	31.70	0.02			2564	222222255
9	2801.3	1.848	1.642	27.807	37.028	45.836	34.760	34.759	4.71	94.07	2.18	31.10	0.02			2761	222222255
8	3001.9	1.581	1.362	27.815	37.051	45.875	34.744	34.741	4.64	104.59	2.26	32.10	0.01			2957	222222255
7	3105.7	1.500	1.272	27.819	37.061	45.889	34.742	34.741	4.71	104.92	2.25	31.90	0.02			3059	222222255
6	3204.3	1.434	1.199	27.824	37.070	45.902	34.741	34.739	4.73	106.27	2.26	31.90	0.01			3155	222222255
5	3308.2	1.337	1.094	27.822	37.074	45.912	34.730	34.729	4.71	112.04	2.28	32.60	0.02			3257	222222255
4	3406.7	1.246	0.995	27.822	37.080	45.923	34.722	34.721	4.64	116.78	2.35	33.00	0.02			3353	222222255
3	3502.8	1.181	0.923	27.826	37.087	45.935	34.720	34.716	4.69	117.80	2.32	33.00	0.02			3447	222222255
2	3630.2	1.122	0.852	27.827	37.093	45.944	34.716	34.715	4.77	119.60	2.33	33.00	0.02			3571	222222255

CRUISE: CD 29 STA: 35 DATE (D/M/Y): 22-11-87 TIME: 1538 LAT: 33 33.66 S LONG: 48 14.68 E

GRAVITY= 9.7961 M/S CORIOLIS= -.88625E-04 1/S SOUND SPEED= 1501.3 M/S Depth= 3976 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.648	35.526	5.34	19.648	25.257	33.711	41.802	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.648	35.526	5.34	19.648	25.257	33.711	41.802	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.046	35.510	5.34	19.042	25.401	33.874	41.983	0.053	0.1	-16.42	0.417	-357.67	3.777	19.9
30	18.582	35.530	5.45	18.576	25.535	34.023	42.144	0.078	0.1	-83.63	2.088	-1792.37	8.455	29.8
40	17.813	35.546	5.47	17.806	25.739	34.252	42.397	0.102	0.2	-83.14	2.787	-1780.98	8.428	39.8
50	17.195	35.565	5.60	17.187	25.904	34.437	42.600	0.123	0.3	-43.52	0.632	-865.32	5.875	49.7
100	16.049	35.555	5.27	16.034	26.168	34.740	42.940	0.221	1.0	-13.72	-0.619	-201.61	2.836	99.4
125	15.767	35.536	5.23	15.748	26.219	34.801	43.011	0.267	1.6	-11.92	-1.097	-152.38	2.465	124.3
150	15.469	35.506	5.18	15.445	26.264	34.857	43.077	0.313	2.2	-8.42	-0.469	-123.45	2.219	149.1
200	15.163	35.481	5.19	15.133	26.315	34.919	43.150	0.402	3.8	-7.52	-0.972	-74.43	1.723	198.8
250	14.677	35.421	5.08	14.640	26.376	34.999	43.248	0.489	5.8	-9.75	-0.961	-111.83	2.112	248.4
300	14.076	35.350	5.06	14.033	26.451	35.098	43.368	0.573	8.2	-11.28	-1.400	-107.83	2.074	298.1
350	13.687	35.303	5.11	13.637	26.498	35.160	43.444	0.655	10.9	-6.15	-0.758	-57.50	1.514	347.7
400	13.297	35.252	5.12	13.240	26.540	35.218	43.517	0.736	14.0	-10.01	-1.489	-75.60	1.737	397.3
450	12.783	35.173	5.12	12.721	26.583	35.282	43.600	0.815	17.4	-9.28	-1.446	-63.36	1.590	446.9
500	12.280	35.092	5.12	12.221	26.619	35.338	43.676	0.893	21.2	-11.99	-1.807	-81.53	1.803	496.5
600	11.139	34.936	5.01	11.063	26.715	35.482	43.866	1.044	29.6	-13.64	-1.696	-102.93	2.026	595.6
700	9.597	34.758	4.92	9.516	26.845	35.679	44.126	1.184	38.9	-14.48	-1.492	-114.79	2.140	694.7
800	8.151	34.618	4.76	8.066	26.964	35.865	44.373	1.314	48.8	-15.35	-1.385	-119.15	2.180	793.7
900	6.771	34.504	4.70	6.684	27.071	36.038	44.607	1.431	59.0	-15.34	-1.118	-117.86	2.168	892.6
1000	5.358	34.417	4.72	5.272	27.181	36.217	44.852	1.537	69.2	-9.52	-0.451	-80.64	1.793	991.5
1200	3.956	34.406	4.54	3.864	27.328	36.435	45.137	1.722	89.9	-4.37	0.235	-60.19	1.549	1189.1
1400	3.266	34.491	4.26	3.164	27.464	36.606	45.341	1.879	110.7	-2.60	0.449	-54.53	1.475	1386.5
1600	2.877	34.583	4.11	2.762	27.574	36.736	45.490	2.012	131.0	-1.62	0.414	-42.35	1.300	1583.7
1800	2.599	34.650	4.16	2.471	27.652	36.829	45.597	2.127	151.0	-1.07	0.255	-27.06	1.039	1780.7
2000	2.418	34.690	4.22	2.275	27.701	36.888	45.665	2.231	171.2	-0.80	0.157	-18.29	0.854	1977.5
2200	2.298	34.716	4.28	2.139	27.733	36.927	45.711	2.329	192.2	-0.69	0.125	-15.33	0.782	2174.1
2400	2.179	34.739	4.39	2.004	27.763	36.964	45.754	2.423	214.1	-0.69	0.091	-13.41	0.731	2370.5
2600	2.026	34.747	4.46	1.836	27.782	36.992	45.791	2.512	236.8	-0.96	0.002	-11.23	0.669	2566.8
2800	1.880	34.747	4.49	1.673	27.795	37.014	45.821	2.598	260.6	-0.91	-0.021	-9.46	0.614	2762.8
3000	1.682	34.740	4.50	1.461	27.804	37.035	45.854	2.682	285.3	-1.12	-0.040	-10.98	0.662	2958.7
3200	1.487	34.732	4.57	1.251	27.813	37.056	45.885	2.763	310.8	-0.92	-0.036	-9.01	0.600	3154.4
3400	1.355	34.726	4.64	1.102	27.818	37.070	45.908	2.840	337.0	-0.77	-0.028	-7.92	0.562	3349.9
3600	1.223	34.721	4.69	0.953	27.824	37.084	45.930	2.916	364.1	-0.63	-0.023	-6.60	0.513	3545.3
3800	1.124	34.716	4.75	0.837	27.828	37.095	45.947	2.990	392.0	-0.52	-0.022	-5.44	0.466	3740.4
4000	1.074	34.713	4.77	0.767	27.830	37.101	45.956	3.064	421.1	-0.27	-0.010	-5.44	0.000	3935.4
4033	1.068	34.713	4.77	0.758	27.830	37.102	45.958	3.076	426.0	-0.29	-0.013	-5.44	0.000	3967.6

BOTL NO.	PRES DBAR	CTDTEMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	0.2	19.595	19.595	24.650	33.116	41.217	34.713	35.532	5.43	1.63	0.19	0.00	0.02	1.979	1.291	0	222222222
23	100.5	15.865	15.849	26.209	34.787	42.993	35.553	35.540	5.23	3.00	0.42	3.80	0.09	2.059	1.249	99	222222222
22	204.5	14.916	14.885	26.364	34.978	43.217	35.475	35.444	5.00	3.71	0.54	6.00	0.04	2.021	1.217	202	222222222
21	305.1	13.863	13.819	26.493	35.147	43.425	35.345	35.323	4.99	4.06	0.71	8.20	0.03	1.938	1.180	302	222222222
20	402.5	12.992	12.936	26.599	35.288	43.598	35.249	35.212	5.18	4.24	0.84	9.80	0.02	1.859	1.145	399	222222222
19	501.3	11.931	11.865	26.685	35.418	43.769	35.089	35.044	5.09	5.11	1.02	12.60	0.02	1.587	0.966	496	222222222
18	602.7	10.879	10.804	26.755	35.533	43.927	34.928	34.919	4.99	6.32	1.16	15.10	0.02	1.378	0.868	597	222222222
14	1401.0	3.272	3.170	27.463	36.605	45.340	34.491	34.490	4.22	59.33	2.39	33.90	0.02	0.151	0.138	1385	222222222
13	1699.9	2.730	2.600	27.616	36.786	45.547	34.619	34.615	4.12	74.32	2.38	33.70	0.02	0.039		1680	222222225
12	1999.9	2.439	2.296	27.699	36.885	45.661	34.690	34.685	4.21	83.12	2.31	32.80	0.02			1975	222222255
11	2205.7	2.299	2.140	27.734	36.920	45.711	34.717	34.718	4.30	87.11	2.30	32.20	0.01			2177	222222255
10	2402.4	2.179	2.004	27.762	36.963	45.753	34.739	34.739	4.39	89.56	2.24	31.60	0.00	0.001	0.000	2370	222222222
9	2602.7	2.040	1.849	27.781	36.990	45.788	34.747	34.749	4.45	93.71	2.23	31.60	0.00			2566	222222255
8	2804.4	1.875	1.668	27.795	37.014	45.822	34.747	34.749	4.49	99.94	2.22	32.00	0.00			2764	222222255
7	2999.9	1.677	1.456	27.805	37.036	45.855	34.740	34.739	4.51	106.01	2.25	32.30	0.01			2955	222222255
6	3204.1	1.463	1.227	27.814	37.058	45.889	34.731	34.731	4.57	110.35	2.26	32.30	0.00	0.001		3155	222222225
5	3404.0	1.336	1.084	27.820	37.072	45.911	34.726	34.728	4.63	114.52	2.33	32.70	0.00			3350	222222255
4	3607.7	1.215	0.945	27.825	37.086	45.932	34.721	34.722	4.70	116.62	2.30	32.70	0.00	0.006	0.000	3549	222222222
3	3709.4	1.129	0.842	27.827	37.094	45.946	34.716	34.721	4.78	119.42	2.30	32.80	0.02	0.000		3727	222222225
1	4034.0	1.068	0.757	27.831	37.102	45.958	34.713	34.713	4.71	121.70	2.29	32.90	0.01	0.000		3965	222222225

CRUISE: CD 29 STA: 36 DATE (D/M/Y): 23-11-87 TIME: 0123 LAT: 33 45 01 S LONG 49 30 39 E

GRAVITY= 9.7963 M/S CORIOLIS= -.81026E-04 1/S SOUND SPEED= 1503.8 M/S Depth= 4323 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.423	35.331	3.40	19.423	25.166	33.630	41.729	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.423	35.331	3.40	19.423	25.166	33.630	41.729	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.219	35.436	5.27	19.216	25.301	33.769	41.873	0.055	0.1	-19.09	0.413	-415.92	4.063	19.9
30	19.096	35.462	5.27	19.091	25.352	33.825	41.932	0.081	0.1	-35.67	7.269	-1167.00	6.806	29.9
40	18.682	35.527	5.32	18.595	25.529	34.016	42.137	0.106	0.2	-39.97	2.008	-925.47	6.061	39.8
50	18.378	35.530	5.37	18.369	25.587	34.082	42.210	0.131	0.3	-20.36	-0.952	-347.89	3.716	49.7
100	16.496	35.572	5.48	16.400	26.077	34.633	42.819	0.237	1.1	-26.74	-1.114	-431.85	4.140	99.5
125	15.872	35.539	5.18	15.853	26.197	34.775	42.982	0.285	1.7	-17.23	-1.283	-248.05	3.138	124.3
150	15.545	35.510	4.99	15.521	26.250	34.840	43.058	0.331	2.3	-16.43	-1.469	-212.34	2.903	149.1
200	14.980	35.457	5.01	14.950	26.337	34.948	43.186	0.419	3.9	-11.05	-1.183	-123.37	2.213	198.8
250	14.385	35.388	5.08	14.348	26.413	35.048	43.306	0.505	5.9	-9.69	-1.137	-98.87	1.981	248.4
300	13.921	35.332	5.03	13.877	26.470	35.123	43.398	0.588	8.2	-9.13	-1.038	-92.37	1.915	298.1
350	13.620	35.296	5.18	13.570	26.507	35.171	43.458	0.670	10.9	-6.43	-0.737	-63.53	1.588	347.7
400	13.299	35.253	5.25	13.242	26.541	35.218	43.517	0.750	14.0	-5.49	-0.820	-41.60	1.285	397.3
450	12.900	35.192	5.21	12.837	26.575	35.268	43.582	0.829	17.4	-10.33	-1.637	-69.81	1.665	446.9
500	12.412	35.115	5.17	12.344	26.612	35.326	43.659	0.908	21.2	-9.02	-1.377	-61.41	1.561	496.5
600	11.290	34.984	5.06	11.213	26.703	35.464	43.841	1.060	29.7	-11.90	-1.531	-89.90	1.889	595.6
700	10.154	34.818	4.95	10.070	26.799	35.609	44.033	1.204	39.3	-10.18	-1.105	-81.15	1.795	694.7
800	8.833	34.682	4.85	8.745	26.910	35.779	44.258	1.339	49.6	-13.82	-1.303	-110.75	2.097	793.7
900	7.357	34.552	4.72	7.267	27.029	35.967	44.511	1.463	60.3	-14.07	-1.129	-111.36	2.102	892.7
1000	6.012	34.458	4.70	5.921	27.134	36.138	44.742	1.575	71.2	-13.41	-0.779	-111.67	2.105	991.6
1200	4.401	34.417	4.49	4.305	27.290	36.375	45.055	1.770	93.0	-5.76	0.135	-71.12	1.680	1189.2
1400	3.525	34.474	4.22	3.420	27.426	36.555	45.278	1.936	115.0	-3.18	0.403	-58.84	1.528	1386.6
1600	3.033	34.555	4.10	2.916	27.538	36.692	45.439	2.078	136.6	-2.30	0.392	-48.57	1.388	1583.8
1800	2.680	34.631	4.15	2.551	27.631	36.804	45.588	2.200	157.8	-1.44	0.338	-36.35	1.201	1780.8
2000	2.476	34.684	4.23	2.332	27.692	36.876	45.650	2.308	178.6	-0.75	0.212	-21.38	0.921	1977.6
2200	2.369	34.722	4.32	2.209	27.732	36.922	45.702	2.407	200.0	-0.73	0.162	-18.16	0.849	2174.2
2400	2.259	34.744	4.43	2.083	27.760	36.957	45.743	2.501	222.9	-0.72	0.051	-11.43	0.673	2370.6
2600	2.107	34.752	4.49	1.915	27.779	36.985	45.780	2.592	245.1	-0.87	0.015	-11.10	0.664	2566.9
2800	1.926	34.748	4.47	1.719	27.792	37.009	45.813	2.680	269.3	-1.08	-0.034	-10.75	0.653	2762.9
3000	1.746	34.742	4.49	1.523	27.802	37.029	45.844	2.764	294.4	-0.94	-0.033	-9.29	0.607	2958.8
3200	1.548	34.734	4.53	1.311	27.811	37.050	45.877	2.847	320.4	-1.10	-0.036	-11.47	0.675	3154.5
3400	1.398	34.728	4.59	1.144	27.817	37.067	45.902	2.926	347.0	-0.85	-0.031	-8.83	0.592	3350.0
3600	1.257	34.722	4.67	0.987	27.823	37.082	45.925	3.003	374.4	-0.77	-0.028	-8.15	0.569	3545.3
3800	1.150	34.718	4.72	0.862	27.828	37.093	45.944	3.077	402.5	-0.47	-0.019	-5.06	0.448	3740.5
4000	1.082	34.714	4.77	0.774	27.830	37.101	45.956	3.151	431.8	-0.40	-0.016	-4.48	0.422	3935.5
4200	1.050	34.711	4.80	0.722	27.831	37.105	45.963	3.224	462.3	-0.14	-0.006	-1.53	0.247	4130.3
4397	1.058	34.711	4.79	0.708	27.832	37.106	45.965	3.296	494.2	-0.10	-0.006	-1.53	0.000	4322.1

BOTL NO.	PRES DBAR	CTD TMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	1.0	19.627	19.627	24.640	33.105	41.205	34.711	35.505	5.42	1.74	0.19	0.00	0.00	1.799	1.017	0	222222222
23	105.3	16.327	16.310	26.109	34.672	42.863	35.562	35.566	5.44	2.42	0.27	1.10	0.16	1.947	1.140	044	222222222
22	204.0	14.879	14.848	26.356	34.972	43.212	35.454	35.445	5.17	3.62	0.55	6.00	0.00	1.743	0.962	202	222222222
21	303.4	13.884	13.840	26.474	35.128	43.405	35.327	35.338	5.12	3.46	0.69	8.00	0.00	1.900	1.004	300	222222222
20	404.0	13.156	13.100	26.564	35.247	43.551	35.246	35.231	5.18	3.80	0.77	9.40	0.00	1.701	1.025	400	222222222
19	501.3	12.298	12.231	26.634	35.352	43.689	35.114	35.099	5.12	4.82	0.92	11.50	0.00	1.572	0.910	496	222222222
18	701.7	10.147	10.063	26.798	35.609	44.033	34.816	34.819	4.98	7.89	1.29	17.10	0.00	1.012	0.591	695	222222222
17	902.9	7.474	7.383	27.011	35.944	44.482	34.550	34.557	4.74	17.58	1.78	24.60	-0.01	0.658	0.383	894	222222222
16	1100.8	4.973	4.881	27.220	36.275	44.928	34.408	34.408	4.71	31.71	2.14	30.00	0.00	0.546	0.315	1089	222222222
14	1498.4	3.210	3.100	27.486	36.632	45.370	34.512	34.519	4.09	64.01	2.36	34.00	-0.01	0.071	0.055	1481	222222222
13	1702.2	2.781	2.659	27.590	36.758	45.517	34.592	34.602	4.09	73.03	2.35	33.40	-0.01	0.040	0.021	1682	222222222
12	1901.5	2.547	2.411	27.666	36.847	45.617	34.661	34.662	4.17	78.97	2.29	32.90	0.00			1878	222222255
11	2201.9	2.373	2.213	27.732	36.922	45.701	34.722	34.718	4.31	84.24	2.27	32.00	0.01			2173	222222255
10	2501.3	2.181	1.996	27.770	36.971	45.762	34.748	34.744	4.45	87.80	2.22	31.20	0.01			2467	222222255
9	2703.3	2.020	1.820	27.786	36.997	45.797	34.751	34.749	4.46	94.09	2.22	31.50	0.02			2665	222222255
8	2902.3	1.829	1.614	27.797	37.020	45.830	34.745	34.744	4.47	101.38	2.22	31.90	0.02	0.005	0.007	2860	222222222
7	3104.5	1.671	1.662	27.804	37.037	45.856	34.738		4.52	106.65	2.24	32.10	0.02			3058	252222255
6	3300.5	1.485	1.239	27.813	37.057	45.887	34.731	34.734	4.54	110.89	2.29	32.20	0.01	0.008	0.008	3249	222222222
5	3507.0	1.328	1.065	27.820	37.074	45.913	34.725	34.721	4.62	115.46	2.28	32.60	0.01			3451	222222255
4	3705.5	1.195	0.915	27.826	37.088	45.936	34.720	34.721	4.70	116.81	2.30	32.40	0.01	0.010		3645	222222222
3	3907.0	1.111	0.812	27.829	37.098	45.951	34.716	34.718	4.77	120.03	2.30	32.70	0.00	0.014		3841	222222225
2	4108.3	1.060	0.742	27.831	37.103	45.960	34.712	34.709		121.72	2.32	32.80	0.01			4037	225222255
1	4398.0	1.059	1.013	27.832	37.106	45.965	34.711		4.79	122.72	2.31	32.90	0.01	0.017	0.005	4319	252222222

CRUISE: CD 29 STA: 37 DATE (D/M Y): 23-11-87 TIME: 1135 LAT: 33 59.75 S LONG: 50 55.55 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81545E-04 1/S SOUND SPEED= 1584.2 M/S Depth= 4336 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.187	35.588	4.73	20.187	25.162	33.599	41.673	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.187	35.588	4.73	20.187	25.162	33.599	41.674	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.720	35.553	5.07	19.716	25.260	33.712	41.800	0.055	0.1	0.82	3.130	-173.66	2.617	19.9
30	19.737	35.577	5.03	19.732	25.274	33.725	41.813	0.082	0.1	-2.47	1.620	-150.55	2.437	29.9
40	19.534	35.595	5.00	19.526	25.341	33.798	41.891	0.109	0.2	-38.68	2.472	-957.09	6.144	39.8
50	19.113	35.621	5.15	19.104	25.470	33.940	42.045	0.135	0.3	-39.71	0.883	-870.52	5.859	49.7
100	16.963	35.597	5.24	16.947	25.986	34.527	42.698	0.246	1.2	-20.34	-0.136	-382.26	3.883	99.5
125	16.618	35.590	5.10	16.598	26.064	34.616	42.798	0.296	1.8	-9.00	-0.321	-142.47	2.370	124.3
150	16.345	35.576	4.99	16.320	26.117	34.679	42.870	0.345	2.4	-11.62	-0.715	-172.50	2.608	149.1
200	15.694	35.524	4.96	15.663	26.229	34.814	43.027	0.440	4.1	-14.35	-1.255	-186.51	2.712	198.8
250	15.149	35.476	4.89	15.111	26.315	34.921	43.153	0.530	6.2	-12.34	-1.240	-145.89	2.399	248.5
300	14.428	35.400	4.94	14.383	26.416	35.048	43.306	0.617	8.6	-13.65	-1.477	-148.90	2.423	298.1
350	13.922	35.340	5.00	13.871	26.478	35.130	43.406	0.701	11.4	-6.79	-0.862	-64.34	1.593	347.7
400	13.606	35.298	5.04	13.549	26.512	35.177	43.465	0.783	14.5	-9.07	-1.239	-78.48	1.759	397.4
450	13.198	35.238	4.99	13.134	26.551	35.233	43.536	0.864	18.1	-6.39	-0.950	-49.13	1.392	446.9
500	12.841	35.182	4.93	12.772	26.580	35.276	43.593	0.943	21.9	-7.92	-1.262	-53.67	1.455	496.5
600	11.670	35.006	4.87	11.592	26.672	35.417	43.779	1.099	30.7	-11.43	-1.495	-89.84	1.882	595.7
700	10.497	34.860	4.80	10.411	26.772	35.567	43.977	1.247	40.5	-12.84	-1.574	-97.11	1.957	694.7
800	9.359	34.734	4.69	9.267	26.867	35.713	44.170	1.386	51.1	-15.05	-1.494	-120.83	2.183	793.8
900	7.727	34.582	4.60	7.634	27.000	35.921	44.448	1.514	62.1	-13.59	-1.117	-109.67	2.080	892.7
1000	6.424	34.479	4.61	6.330	27.099	36.002	44.668	1.629	73.3	-13.20	-0.918	-104.07	2.026	991.6
1200	4.476	34.407	4.48	4.380	27.274	36.355	45.032	1.830	95.8	-6.62	-0.030	-71.47	1.679	1189.2
1400	3.544	34.452	4.26	3.438	27.406	36.535	45.257	2.000	118.2	-3.40	0.375	-59.53	1.532	1386.7
1600	3.038	34.538	4.12	2.922	27.523	36.678	45.424	2.144	140.3	-2.02	0.423	-47.92	1.375	1583.9
1800	2.756	34.611	4.09	2.626	27.608	36.777	45.538	2.269	162.0	-1.19	0.319	-32.66	1.135	1780.9
2000	2.539	34.675	4.17	2.394	27.679	36.860	45.631	2.361	183.7	-0.99	0.255	-26.81	1.028	1977.7
2200	2.378	34.714	4.27	2.218	27.725	36.915	45.694	2.483	205.4	-0.89	0.183	-21.41	0.919	2174.3
2400	2.213	34.738	4.33	2.038	27.759	36.958	45.746	2.578	227.6	-0.99	0.056	-14.80	0.764	2370.7
2600	2.063	34.748	4.35	1.872	27.780	36.988	45.784	2.668	250.6	-0.67	0.029	-9.65	0.617	2566.9
2800	1.897	34.747	4.44	1.690	27.793	37.011	45.818	2.755	274.6	-1.18	-0.037	-11.71	0.679	2763.0
3000	1.717	34.739	4.45	1.495	27.801	37.031	45.847	2.839	299.4	-0.68	-0.024	-6.73	0.515	2958.9
3200	1.540	34.734	4.56	1.302	27.811	37.051	45.878	2.921	325.3	-0.91	-0.021	-10.03	0.629	3154.6
3400	1.393	34.728	4.59	1.139	27.818	37.067	45.903	3.000	351.8	-0.76	-0.032	-7.68	0.550	3350.1
3600	1.287	34.724	4.62	1.016	27.822	37.079	45.921	3.077	379.3	-0.53	-0.020	-5.56	0.468	3545.4
3800	1.213	34.720	4.65	0.923	27.825	37.087	45.934	3.153	408.0	-0.48	-0.018	-5.28	0.456	3740.6
4000	1.160	34.717	4.68	0.851	27.827	37.094	45.945	3.228	437.9	-0.30	-0.012	-3.39	0.366	3935.6
4200	1.135	34.715	4.71	0.804	27.829	37.098	45.951	3.303	469.4	-0.14	-0.005	-1.69	0.258	4130.4
4393	1.134	34.713	4.73	0.782	27.829	37.099	45.954	3.376	501.5	-0.12	-0.005	-1.69	0.000	4318.3

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
24	9.8	19.804	19.802	25.198	33.648	41.734	35.502	35.615	5.24	1.34	0.18	0.10	0.02				9	222222255
23	75.2	17.341	17.329	25.890	34.418	42.577	35.591	35.604	5.42	2.00	0.26	0.10	0.01				74	222222255
22	202.0	15.527	15.496	26.265	34.856	43.075	35.522	35.510	4.82	3.02	0.48	5.20	0.02				200	222222255
21	300.6	14.435	14.391	26.413	35.046	43.303	35.399	35.402	4.86	3.35	0.68	7.00	0.02				298	222222255
20	400.8	13.667	13.610	26.499	35.162	43.447	35.297	35.306	5.08	3.67	0.75	8.30	0.02				397	222222255
19	501.5	12.767	12.698	26.593	35.292	43.612	35.180	35.170	4.91	4.16	0.88	10.50	0.02	1.930	1.056		497	222222222
18	700.4	10.614	10.527	26.751	35.542	43.947	34.800	34.808	4.82	6.40	1.18	15.80	0.01				693	222222255
17	902.4	7.882	7.788	26.976	35.890	44.410	34.580	34.593	4.52	15.09	1.58	23.40	-0.01				893	222222255
16	1002.3	6.310	6.285	27.111	36.100	44.691	34.476		4.66								992	252555555
15	1101.4	5.183	5.146	27.208	36.254	44.898	34.421		4.53	30.74	2.04	29.60	0.00				1090	252222255
14	1199.9	4.482	4.385	27.274	36.354	45.031	34.407	34.405	4.53	38.04	2.20	31.40	0.00	0.460	0.256		1187	222222222
13	1497.9	3.268	3.158	27.465	36.608	45.343	34.492	34.491	4.12	59.04	2.34	34.10	0.00				1481	222222255
12	1700.7	2.864	2.740	27.573	36.737	45.492	34.580	34.578	4.05	71.49	2.34	33.80	-0.01				1680	222222255
11	1901.2	2.632	2.494	27.648	36.824	45.590	34.647	34.647	4.16	75.66	2.26	33.00	0.00				1878	222222255
10	2100.4	2.445	2.293	27.705	36.891	45.667	34.697	34.696	4.23	79.83	2.25	32.10	0.00				2073	222222255
9	2402.6	2.189	2.014	27.761	36.961	45.751	34.738	34.738	4.35	86.97	2.19	31.40	0.00	0.036	0.027		2370	222222222
8	2703.7	1.965	1.766	27.789	37.003	45.805	34.749	34.749	4.40	95.34	2.18	31.60	0.01				2665	222222255
7	3006.5	1.682	1.460	27.804	37.035	45.853	34.739	34.738	4.45	103.01	2.19	32.10	0.01				2962	222222255
6	3304.1	1.451	1.206	27.816	37.062	45.894	34.732	34.737	4.67	105.97	2.26	32.00	0.01				3253	222222255
5	3606.2	1.284	1.012	27.823	37.080	45.922	34.724	34.723	4.69	114.17	2.32	32.60	0.01	0.018	0.011		3548	222222222
4	3907.3	1.177	0.877	27.827	37.091	45.941	34.718	34.722	4.67	117.13	2.30	32.70	0.00				3841	222222255
3	4107.7	1.140	0.820	27.828	37.096	45.949	34.715	34.719	4.69	118.52	2.30	32.70	0.00				4037	222222255
2	4310.4	1.133	0.791	27.829	37.099	45.953	34.714	34.717	4.70	119.56	2.30	32.90	0.00	0.016			4234	222222225
1	4396.9	1.134	0.782	27.830	37.100	45.955	34.714	34.714	4.61	119.56	2.32	32.90	-0.01	0.019	0.007		4318	222222222

CRUISE: CD 29 STA: 38 DATE (D/M/Y): 23-11-87 TIME: 2039 LAT: 33 59.54 S LONG: 52 10.57 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81538E-04 1/S SOUND SPEED= 1505.3 M/S Depth= 4484 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPT
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m/s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	20.759	35.676	5.22	20.759	25.076	33.495	41.552	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.759	35.676	5.22	20.759	25.076	33.495	41.552	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	19.533	35.655	5.34	19.530	25.386	33.843	41.935	0.054	0.1	-15.18	0.040	-318.52	3.544	19.9
30	19.417	35.655	5.33	19.411	25.417	33.877	41.973	0.079	0.1	-2.93	0.002	-60.96	1.551	29.8
40	19.379	35.654	5.35	19.372	25.426	33.887	41.984	0.105	0.2	-6.24	-0.457	-101.72	2.003	39.8
50	19.284	35.646	5.29	19.275	25.445	33.910	42.010	0.130	0.3	-22.92	-0.999	-412.79	4.035	49.7
100	16.820	35.584	5.29	16.804	26.010	34.555	42.731	0.241	1.2	-22.49	-0.766	-381.94	3.881	99.5
125	16.280	35.563	5.55	16.260	26.122	34.686	42.879	0.290	1.7	-21.06	-1.790	-295.53	3.414	124.3
150	15.941	35.547	5.41	15.917	26.188	34.764	42.969	0.338	2.4	-9.22	-0.138	-174.30	2.622	149.1
200	15.465	35.505	5.05	15.434	26.266	34.860	43.080	0.430	4.0	-12.09	-1.138	-149.46	2.428	198.8
250	14.880	35.442	5.16	14.842	26.349	34.964	43.206	0.518	6.1	-8.22	-0.943	-88.5	1.868	248.5
300	14.429	35.388	5.14	14.384	26.406	35.039	43.297	0.605	8.5	-8.01	-0.815	-90.68	1.891	298.1
350	14.118	35.359	5.20	14.066	26.451	35.096	43.365	0.689	11.3	-8.76	-0.974	-92.17	1.907	347.7
400	13.729	35.309	5.15	13.671	26.496	35.156	43.439	0.772	14.5	-6.61	-0.838	-61.89	1.562	397.3
450	13.382	35.269	5.28	13.319	26.537	35.211	43.508	0.854	18.0	-7.88	-1.070	-67.65	1.633	446.9
500	12.959	35.199	5.19	12.889	26.570	35.261	43.574	0.935	21.9	-8.40	-1.347	-57.43	1.505	496.5
600	11.838	35.029	5.11	11.759	26.658	35.396	43.752	1.092	30.7	-10.34	-1.453	-75.55	1.726	595.7
700	10.819	34.894	5.01	10.731	26.742	35.524	43.920	1.242	40.7	-9.05	-1.104	-70.98	1.673	694.7
800	9.942	34.795	4.95	9.847	26.818	35.638	44.071	1.385	51.6	-11.16	-1.171	-90.89	1.893	793.8
900	8.555	34.656	4.85	8.457	26.934	35.817	44.308	1.520	63.3	-16.31	-1.441	-133.84	2.298	892.7
1000	6.933	34.521	4.75	6.835	27.064	36.023	44.586	1.641	75.0	-12.86	-0.959	-103.90	2.824	991.6
1200	4.485	34.399	4.66	4.388	27.267	36.347	45.024	1.849	98.2	-8.82	-0.109	-91.76	1.902	1189.3
1400	3.515	34.450	4.40	3.410	27.408	36.538	45.262	2.017	120.5	-3.31	0.412	-60.73	1.548	1386.7
1600	2.946	34.554	4.23	2.830	27.544	36.704	45.454	2.159	142.2	-2.25	0.509	-55.83	1.484	1583.9
1800	2.692	34.622	4.22	2.563	27.622	36.795	45.558	2.280	163.1	-1.03	0.258	-27.12	1.034	1780.9
2000	2.520	34.668	4.29	2.375	27.675	36.857	45.629	2.390	184.5	-0.98	0.251	-26.30	1.019	1977.7
2200	2.323	34.717	4.42	2.164	27.732	36.925	45.707	2.491	206.1	-1.17	0.159	-23.10	0.954	2174.3
2400	2.131	34.736	4.52	1.957	27.764	36.968	45.760	2.584	227.9	-0.97	0.064	-15.01	0.769	2370.7
2600	1.955	34.742	4.53	1.766	27.784	36.998	45.800	2.672	250.4	-0.97	0.006	-11.62	0.677	2566.9
2800	1.779	34.740	4.56	1.575	27.796	37.021	45.833	2.757	273.7	-0.92	-0.018	-9.72	0.619	2763.0
3000	1.599	34.736	4.57	1.379	27.807	37.043	45.865	2.839	297.9	-0.97	-0.029	-9.92	0.626	2958.9
3200	1.453	34.730	4.62	1.218	27.814	37.059	45.890	2.918	323.0	-0.77	-0.026	-7.87	0.557	3154.6
3400	1.333	34.725	4.67	1.081	27.819	37.072	45.911	2.996	349.0	-0.61	-0.021	-6.44	0.504	3350.1
3600	1.252	34.722	4.71	0.982	27.823	37.082	45.926	3.072	376.1	-0.50	-0.017	-5.43	0.463	3545.4
3800	1.175	34.719	4.75	0.886	27.827	37.091	45.940	3.147	404.4	-0.37	-0.015	-4.00	0.397	3740.6
4000	1.140	34.716	4.81	0.831	27.828	37.096	45.948	3.221	434.1	-0.21	-0.009	-2.30	0.301	3935.6
4200	1.124	34.714	4.82	0.794	27.829	37.099	45.953	3.296	465.4	-0.11	-0.005	-1.19	0.216	4130.4
4400	1.130	34.713	4.85	0.778	27.830	37.100	45.955	3.372	498.6	-0.07	-0.003	-0.86	0.184	4325.1
4587	1.143	34.713	4.86	0.769	27.830	37.101	45.956	3.443	531.5	-0.02	0.003	-0.86	0.000	4506.9

BOTL	PRES	CTD	TM	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.0	20.277	20.277	25.205	33.639	41.709	35.676	35.695	5.34	2.50	0.19	0.10	-0.01	2.030	1.236	2	22222222
23	101.3	16.663	16.647	26.045	34.596	42.776	35.581	35.578	5.32	3.72	0.37	2.30	0.18	2.158	1.220	100	22222222
22	202.8	15.514	15.482	26.254	34.846	43.065	35.504	35.508	5.18	4.13	0.49	4.90	0.03	2.122	1.210	201	22222222
21	304.9	14.417	14.372	26.406	35.040	43.298	35.385	35.388	5.10	4.78	0.63	7.30	0.00	2.103	1.116	302	22222222
20	404.6	13.599	13.542	26.519	35.185	43.472	35.305	35.295	5.19	5.02	0.74	8.60	0.01	1.896	1.154	401	22222222
19	500.3	12.847	12.770	26.590	35.286	43.602	35.196	35.184	5.16	5.45	0.83	10.30	0.00	1.864	1.167	495	22222222
18	701.7	10.838	10.750	26.738	35.519	43.915	34.893	34.896	5.01	7.77	1.20	15.60	0.00	1.350	0.735	695	22222222
17	997.8	6.681	6.585	27.101	36.072	44.645	34.525	34.505	4.72	22.28	1.83	26.60	0.01	0.657	0.364	987	22222222
16	1299.9	4.008	3.907	27.330	36.435	45.135	34.415	34.409	4.55	44.62	2.26	32.40	0.01	0.332	0.170	1285	22222222
15	1601.8	3.065	2.948	27.534	36.687	45.432	34.554	34.535	4.20	64.71	2.35	33.80	0.00	0.135	0.094	1583	22222222
14	1895.0	2.630	2.493	27.648	36.824	45.591	34.647	34.637	4.21	76.10	2.32	33.10	0.00			1872	22222255
12	2401.8	2.106	1.932	27.766	36.972	45.765	34.737	34.740	4.53	88.80	2.23	31.60	0.01			2369	22222255
11	2601.2	1.932	1.743	27.786	37.001	45.805	34.743	34.740	4.57	94.02	2.25	31.40	0.00			2565	22222255
10	2801.8	1.762	1.558	27.797	37.023	45.836	34.740	34.741	4.56	101.93	2.28	32.00	0.01			2761	22222255
9	3002.0	1.589	1.369	27.808	37.044	45.867	34.736	34.735	4.60	106.90	2.23	32.10	0.02			2958	22222255
8	3203.2	1.457	1.221	27.813	37.058	45.889	34.730	34.732	4.66	112.04	2.29	32.50	0.02			3154	22222255
7	3404.2	1.320	1.067	27.820	37.074	45.913	34.725	34.723		115.27	2.29	32.50	0.01	0.006	0.000	3351	22522222
6	3608.1	1.246	0.975	27.823	37.082	45.926	34.721	34.726	4.73	114.13	2.26	32.20	0.01			3550	22222255
5	3808.3	1.170	0.880	27.827	37.091	45.941	34.718	34.716	4.79	118.57	2.27	32.50	0.02			3745	22222255
2	4357.7	1.127	0.780	27.829	37.099	45.954	34.713	34.707	4.78	119.28	2.33	32.80	0.02	0.012		4280	22222255

CRUISE: CD 29 STA: 39 DATE (D/M/Y): 24-11-87 TIME: 0249 LAT: 33 59.91 S LONG: 52 44.66 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81551E-04 1/S SOUND SPEED= 1505.1 M/S Depth= 4444 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	PC-T-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.703	35.648	5.08	19.703	25.336	33.787	41.874	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.703	35.648	5.08	19.702	25.336	33.787	41.874	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.188	35.620	5.27	19.185	25.449	33.916	42.019	0.052	0.1	-5.39	0.410	-136.07	2.316	19.9
30	19.115	35.620	5.20	19.109	25.468	33.938	42.043	0.077	0.1	-4.80	-0.025	-97.29	1.959	29.8
40	19.082	35.620	5.22	19.074	25.477	33.948	42.054	0.102	0.2	-2.79	-0.020	-56.09	1.487	39.8
50	19.051	35.619	5.20	19.042	25.485	33.957	42.064	0.127	0.3	-12.42	-0.320	-235.34	3.046	49.7
100	16.912	35.594	5.43	16.896	25.996	34.538	42.711	0.239	1.2	-23.45	0.037	-452.34	4.224	99.5
125	16.501	35.585	5.16	16.481	26.087	34.643	42.829	0.289	1.7	-14.26	-0.725	-227.98	2.998	124.3
150	16.233	35.570	5.05	16.209	26.139	34.705	42.899	0.337	2.4	-13.08	-0.892	-173.68	2.617	149.1
200	15.638	35.519	5.07	15.606	26.237	34.825	43.040	0.431	4.1	-9.07	-0.817	-115.92	2.138	198.8
250	15.095	35.468	5.05	15.057	26.321	34.928	43.162	0.521	6.2	-1.15	-1.350	-153.28	2.459	248.5
300	14.416	35.398	5.01	14.372	26.416	35.049	43.307	0.608	8.6	-9.63	-0.974	-109.01	2.073	298.1
350	13.916	35.339	5.07	13.865	26.478	35.131	43.407	0.691	11.4	-8.64	-1.091	-82.11	1.800	347.7
400	13.636	35.301	5.13	13.579	26.509	35.173	43.459	0.774	14.5	-6.66	-0.905	-58.04	1.513	397.3
450	13.229	35.243	5.18	13.166	26.548	35.228	43.530	0.855	18.0	-10.40	-1.548	-79.96	1.776	446.9
500	12.850	35.183	5.12	12.781	26.579	35.275	43.592	0.935	21.9	-13.33	-2.079	-92.68	1.912	496.5
600	11.818	35.027	5.03	11.740	26.660	35.399	43.756	1.090	30.6	-9.54	-1.298	-71.60	1.680	595.7
700	10.671	34.879	4.97	10.584	26.756	35.544	43.947	1.240	40.5	-12.58	-1.482	-99.90	1.985	694.7
800	9.312	34.730	4.84	9.221	26.871	35.719	44.178	1.380	51.2	-14.97	-1.522	-119.99	2.175	793.8
900	7.826	34.593	4.74	7.732	26.994	35.910	44.433	1.508	62.4	-13.85	-1.178	-111.84	2.100	892.7
1000	6.519	34.487	4.69	6.425	27.093	36.072	44.653	1.625	73.6	-11.74	-0.827	-93.53	1.921	991.6
1200	4.627	34.395	4.68	4.529	27.249	36.322	44.992	1.829	96.5	-6.62	-0.002	-73.51	1.703	1189.2
1400	3.431	34.462	4.29	3.327	27.425	36.559	45.287	2.001	119.2	-4.53	0.515	-80.65	1.783	1386.7
1600	2.917	34.562	4.15	2.801	27.554	36.714	45.466	2.141	140.6	-1.87	0.437	-47.23	1.365	1583.9
1800	2.678	34.631	4.16	2.548	27.631	36.804	45.568	2.261	161.5	-1.14	0.305	-31.30	1.111	1780.9
2000	2.492	34.681	4.26	2.348	27.688	36.871	45.644	2.370	182.5	-0.93	0.207	-23.09	0.954	1977.7
2200	2.323	34.714	4.36	2.164	27.729	36.922	45.704	2.470	203.9	-0.86	0.118	-16.96	0.818	2174.3
2400	2.191	34.737	4.38	2.016	27.760	36.960	45.749	2.564	225.9	-0.82	0.074	-13.95	0.742	2370.7
2600	2.042	34.744	4.42	1.852	27.778	36.988	45.785	2.654	248.9	-0.93	0.012	-11.57	0.675	2566.9
2800	1.851	34.742	4.47	1.645	27.793	37.014	45.822	2.740	272.7	-1.01	-0.018	-10.96	0.658	2763.0
3000	1.672	34.738	4.53	1.451	27.803	37.035	45.854	2.824	297.4	-0.88	-0.025	-9.17	0.601	2958.9
3200	1.525	34.732	4.57	1.288	27.811	37.052	45.879	2.905	323.0	-0.80	-0.026	-8.29	0.572	3154.5
3400	1.399	34.728	4.60	1.145	27.817	37.066	45.901	2.984	349.5	-0.54	-0.018	-5.67	0.473	3350.1
3600	1.285	34.723	4.65	1.013	27.822	37.079	45.921	3.061	377.0	-0.55	-0.020	-5.94	0.484	3545.4
3800	1.212	34.719	4.71	0.922	27.825	37.087	45.934	3.137	405.7	-0.61	-0.024	-6.64	0.512	3740.6
4000	1.149	34.716	4.74	0.839	27.828	37.095	45.946	3.212	435.5	-0.19	-0.008	-2.00	0.281	3935.6
4200	1.129	34.715	4.77	0.798	27.829	37.098	45.952	3.287	466.9	-0.10	-0.006	-1.10	0.209	4130.4
4400	1.113	34.713	4.78	0.761	27.830	37.101	45.957	3.362	500.0	-0.10	-0.003	-1.16	0.214	4325.0
4555	1.109	34.712	4.76	0.740	27.831	37.103	45.960	3.421	527.0	-0.34	-0.009	-1.16	0.000	4475.8

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	10.1	19.352	19.351	25.406	33.868	41.966	35.620	35.625	5.39	1.76	0.17	0.00	0.00	2.152	1.156	10	222222222
23	102.0	16.730	16.713	26.039	34.588	42.766	35.594	35.592	5.38	2.45	0.34	1.50	0.14	2.207	1.164	101	222222222
22	203.7	15.520	15.489	26.263	34.855	43.074	35.518	35.507	5.12					2.174	1.228	202	222555522
21	301.4	14.487	14.443	26.400	35.030	43.286	35.396	35.404	5.11	3.84	0.63	6.90	0.01	2.265	1.206	298	222222222
20	400.4	13.619	13.562	26.510	35.174	43.462	35.298	35.297	5.20	4.18	0.74	8.30	0.02	2.067	1.184	399	222222222
19	501.3	12.745	12.676	26.599	35.299	43.619	35.182	35.172	5.17	4.53	0.87	10.30	0.02	1.973	1.060	496	222222222
18	701.0	10.459	10.373	26.792	35.589	43.999	34.877	34.867	4.98	6.94	1.21	16.00	0.00	1.284	0.720	695	222222222
17	902.7	7.590	7.498	27.027	35.953	44.486	34.591	34.569	4.73	17.10	1.76	24.20	-0.02	0.798	0.430	893	222222222
16	1100.2	5.110	5.017	27.206	36.255	44.902	34.411	34.401	4.75	30.18	2.12	29.60	0.00	0.761	0.409	1088	222222222
14	1500.1	3.284	3.173	27.470	36.617	45.352	34.507	34.482	4.22	57.20	2.41	33.70	0.01	0.209	0.121	1483	222222222
13	1699.1	2.069	2.746	27.584	36.747	45.501	34.594	34.574	4.13	71.32	2.40	33.60	0.01			1679	222222255
12	1903.6	2.615	2.478	27.659	36.836	45.603	34.659	34.646	4.19	75.62	2.34	32.90	0.00	0.040	0.029	1880	222222222
11	2100.4	2.458	2.306	27.706	36.892	45.667	34.700	34.687	4.29	78.72	2.29	32.10	0.00			2073	222222255
10	2302.0	2.269	2.102	27.742	36.938	45.724	34.724	34.729	4.40	83.89	2.27	31.40	0.00			2271	222222255
9	2504.6	2.085	1.902	27.773	36.979	45.775	34.742	34.741	4.41	91.99	2.24	31.60	0.01			2470	222222255
8	2803.0	1.845	1.639	27.793	37.014	45.823	34.742	34.742	4.50	99.30	2.27	31.80	0.00	0.024	0.007	2763	222222222
7	3106.7	1.571	1.342	27.809	37.047	45.871	34.735	34.733		107.65	2.29	32.10	0.00			3060	225222255
6	3404.2	1.355	1.102	27.820	37.072	45.909	34.728	34.725	4.63	111.44	2.29	32.30	0.00	0.013		3351	222222255
5	3706.7	1.237	0.956	27.824	37.084	45.930	34.721	34.722	4.69	116.60	2.33	32.60	0.00			3646	222222255
4	4007.4	1.149	0.839	27.828	37.095	45.946	34.716	34.716	4.73	117.99	2.33	32.70	0.00	0.014	0.017	3939	222222222
3	4209.2	1.132	0.800	27.829	37.098	45.951	34.714	34.713	4.77	119.72	2.34	32.80	-0.01	0.015	0.011	4135	222222222
2	4411.7	1.125	1.076	27.830	37.100	45.956	34.713		4.75	120.92	2.32	32.80	-0.03	0.017	0.000	4332	252222222

CRUISE: CD 29 STA: 40 DATE (D/M/Y): 24-11-87 TIME: 0904 LAT: 34 0 42 S LONG: 53 10 22 E

GRAVITY= 9.7965 M/S CORIOLIS= -0.81569E-04 1/S SOUND SPEED= 1505.6 M/S Depth= 4607 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m/s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.989	35.645	4.47	19.989	25.258	33.701	41.780	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.989	35.645	4.47	19.989	25.258	33.701	41.780	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	18.748	35.605	5.44	18.744	25.550	34.032	42.148	0.051	0.1	-28.52	-0.656	-538.79	4.609	19.9
30	18.439	35.597	5.47	18.434	25.622	34.114	42.239	0.075	0.1	-55.06	-1.758	-996.04	6.267	29.8
40	17.836	35.578	5.53	17.831	25.757	34.269	42.412	0.098	0.2	-27.84	-0.704	-505.57	4.465	39.8
50	17.593	35.571	5.61	17.584	25.813	34.332	42.483	0.120	0.3	-31.64	-0.719	-573.42	4.755	49.7
100	16.307	35.573	5.28	16.291	26.122	34.685	42.877	0.222	1.1	-12.47	-0.262	-217.28	2.927	99.4
125	15.969	35.550	5.28	15.950	26.183	34.758	42.961	0.269	1.6	-15.65	-1.104	-235.38	3.046	124.3
150	15.649	35.522	5.17	15.625	26.236	34.822	43.037	0.315	2.3	-13.10	-0.769	-204.04	2.836	149.1
200	15.325	35.511	5.34	15.294	26.301	34.900	43.125	0.405	3.9	-4.94	-0.323	-69.45	1.655	198.8
250	14.987	35.463	5.29	14.949	26.341	34.952	43.190	0.494	5.9	-10.50	-1.359	-104.31	2.028	248.4
300	14.577	35.413	5.12	14.533	26.393	35.020	43.272	0.588	8.3	-9.46	-0.968	-107.30	2.057	298.1
350	14.116	35.363	5.18	14.065	26.455	35.100	43.369	0.665	11.1	-7.37	-0.978	-67.83	1.635	347.7
400	13.709	35.311	5.21	13.651	26.501	35.162	43.446	0.747	14.3	-4.15	-0.481	-41.64	1.281	397.3
450	13.336	35.259	5.23	13.272	26.539	35.215	43.513	0.829	17.8	-8.40	-1.200	-68.67	1.645	446.9
500	12.839	35.181	5.20	12.770	26.580	35.276	43.593	0.909	21.7	-9.16	-1.448	-63.30	1.580	496.5
600	11.624	34.999	5.05	11.546	26.674	35.421	43.786	1.065	30.4	-12.79	-1.747	-94.57	1.931	595.6
700	10.321	34.836	4.97	10.236	26.784	35.587	44.004	1.211	40.1	-11.52	-1.305	-92.14	1.906	694.7
800	8.964	34.693	4.84	8.875	26.898	35.762	44.235	1.349	50.6	-15.17	-1.490	-122.12	2.194	793.7
900	7.773	34.583	4.75	7.688	26.994	35.913	44.438	1.475	61.5	-11.39	-0.971	-89.09	1.883	892.7
1000	6.412	34.476	4.76	6.318	27.098	36.082	44.668	1.591	72.8	-14.46	-1.031	-113.31	2.114	991.6
1200	4.549	34.396	4.66	4.452	27.258	36.335	45.009	1.793	95.4	-6.57	0.019	-73.82	1.706	1189.2
1400	3.503	34.454	4.32	3.399	27.412	36.543	45.267	1.964	118.0	-3.57	0.432	-65.11	1.602	1386.6
1600	3.049	34.535	4.15	2.932	27.520	36.674	45.420	2.107	139.9	-1.73	0.374	-41.90	1.285	1583.8
1800	2.744	34.613	4.15	2.614	27.611	36.781	45.541	2.233	161.7	-1.48	0.380	-39.84	1.253	1780.8
2000	2.551	34.666	4.24	2.406	27.671	36.851	45.622	2.345	183.4	-0.87	0.198	-21.80	0.927	1977.6
2200	2.330	34.710	4.34	2.171	27.725	36.918	45.700	2.448	205.3	-1.10	0.168	-22.07	0.950	2174.2
2400	2.177	34.729	4.46	2.003	27.755	36.956	45.746	2.542	227.5	-0.94	0.067	-14.89	0.766	2370.7
2600	1.950	34.738	4.53	1.769	27.780	36.994	45.796	2.632	250.4	-1.07	0.017	-13.54	0.731	2566.9
2800	1.773	34.740	4.59	1.569	27.796	37.022	45.834	2.717	273.8	-1.12	-0.008	-12.84	0.712	2763.0
3000	1.574	34.736	4.66	1.355	27.809	37.046	45.870	2.798	297.9	-0.93	-0.020	-10.05	0.630	2958.8
3200	1.461	34.733	4.69	1.226	27.815	37.060	45.891	2.877	322.8	-0.61	-0.011	-6.85	0.520	3154.5
3400	1.337	34.728	4.73	1.085	27.821	37.074	45.912	2.954	348.8	-0.57	-0.021	-5.97	0.485	3350.0
3600	1.261	34.725	4.76	0.990	27.825	37.083	45.926	3.030	375.9	-0.68	-0.035	-6.60	0.510	3545.4
3800	1.173	34.719	4.75	0.884	27.827	37.091	45.941	3.105	404.1	-0.38	-0.014	-4.12	0.403	3740.5
4000	1.135	34.716	4.76	0.826	27.829	37.096	45.949	3.179	433.6	-0.18	-0.004	-2.21	0.295	3935.5
4200	1.127	34.716	4.81	0.797	27.830	37.099	45.953	3.254	464.9	-0.14	-0.008	-1.50	0.243	4130.4
4400	1.120	34.714	4.83	0.767	27.831	37.102	45.958	3.329	498.0	-0.11	-0.005	-1.25	0.222	4325.0
4600	1.123	34.713	4.83	0.748	27.831	37.103	45.960	3.406	533.0	-0.11	-0.004	-1.25	0.000	4519.5
4607	1.125	34.713	4.82	0.740	27.832	37.104	45.961	3.439	548.9	-0.09	-0.004	-1.25	0.000	4604.0

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALTY
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.0	19.858	19.857	25.278	33.725	41.808	35.626	35.640	5.43							2	22255555
23	103.3	16.095	16.078	26.170	34.740	42.939	35.571	35.560	5.32	3.06	0.38	3.20	0.00			102	22222255
22	202.4	15.185	15.154	26.332	34.935	43.165	35.510	35.493	5.37	3.43	0.52	4.50	0.00			200	22222255
21	301.1	14.291	14.247	26.454	35.092	43.354	35.412	35.383	5.17	3.96	0.58	7.10	0.00			298	22222255
20	400.4	13.439	13.382	26.557	35.228	43.521	35.311	35.270	5.22	4.32	0.82	8.70	0.00			396	22222255
19	503.0	12.726	12.657	26.599	35.300	43.621	35.177	35.162	5.17	4.68	0.98	10.60	0.00			498	22222255
18	700.7	10.453	10.368	26.761	35.558	43.970	34.836	34.852	4.95	7.48	1.32	16.50	0.00			694	22222255
17	899.6	7.909	7.815	26.975	35.887	44.407	34.584	34.595	4.75	16.17	1.71	23.60	0.00			890	22222255
16	1079.6	5.258	5.166	27.196	36.236	44.876	34.419	34.413	4.74	29.20	2.08	29.80	0.00			1068	22222255
14	1499.2	3.287	3.176	27.465	36.607	45.341	34.494	34.485	4.22	59.62	2.44	33.90	0.00			1482	22222255
13	1698.5	2.870	2.747	27.565	36.729	45.484	34.571	34.578	4.12	70.23	2.44	33.90	0.00			1678	22222255
12	1899.2	2.634	2.496	27.646	36.821	45.588	34.644	34.645	4.17	75.99	2.39	33.30	0.00			1876	22222255
11	2102.1	2.409	2.258	27.702	36.890	45.668	34.690	34.696	4.33	80.53	2.28	32.10	0.00			2075	22222255
10	2296.4	2.224	2.058	27.744	36.942	45.729	34.721	34.723	4.42	84.20	2.29	31.70	0.00			2266	22222255
9	2498.8	2.040	2.039	27.772	36.981	45.779	34.737		4.52	88.74		31.30	0.00			2464	25225255
8	2701.9	1.837	1.841	27.791	37.012	45.821	34.740	34.739	4.58	95.20		31.70	0.00			2664	22225255
7	3002.1	1.569	1.566	27.809	37.047	45.871	34.736		4.68	102.53	2.24	31.90	0.00			2958	25222255
6	3304.9	1.389	1.145	27.819	37.069	45.904	34.731	34.729	4.74	106.90	2.24	32.00	0.00			3254	22222255
5	3595.4	1.268	0.998	27.825	37.082	45.925	34.725	34.724	4.77	112.49	2.27	32.30	0.00			3537	22222255
4	3907.6	1.139	1.115	27.828	37.095	45.947	34.717		4.77							3842	25255555
3	4209.7	1.125	0.794	27.831	37.100	45.954	34.716	34.715	4.79	118.98	2.29	32.80	0.00			4136	22222255
2	4511.2	1.122	0.757	27.831	37.102	45.958	34.713	34.713	4.80	120.41	2.30	32.80	0.00			4429	22222255
1	4690.8	1.125	0.740	27.832	37.104	45.961	34.713	34.714	4.79	121.48	2.30	32.90	0.00			4604	22222255

CRUISE: CD 29 STA: 41 DATE (D/M/Y): 24-11-87 TIME: 1522 LAT: 34 0.45 S LONG: 53 36.86 E

GRAVITY= 9.7965 M/S CORIOLIS= -0.81570E-04 1/S SOUND SPEED= 1505.0 M/S Depth= 4586 Co- Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.379	35.638	5.12	19.379	25.412	33.874	41.970	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.379	35.638	5.12	19.379	25.412	33.874	41.970	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.496	35.606	5.33	18.492	25.614	34.104	42.227	0.049	0.0	-12.80	1.785	-362.13	3.779	19.9
30	18.204	35.613	5.41	18.199	25.693	34.192	42.324	0.073	0.1	-60.47	-1.673	-1102.28	6.592	29.8
40	17.727	35.585	5.45	17.720	25.790	34.305	42.452	0.095	9.2	-34.87	-2.455	-533.42	4.586	39.8
50	17.413	35.566	5.52	17.404	25.852	34.378	42.535	0.117	0.3	-28.52	-1.725	-447.39	4.200	49.7
100	16.207	35.568	5.20	16.191	26.142	34.708	42.904	0.217	1.1	-17.57	-0.916	-271.05	3.269	99.4
125	15.778	35.532	5.05	15.758	26.213	34.795	43.005	0.264	1.6	-18.43	-1.620	-236.01	3.050	124.3
150	15.371	35.510	5.32	15.348	26.289	34.885	43.109	0.309	2.2	-6.03	-0.128	-106.33	2.047	149.1
200	15.214	35.502	5.39	15.183	26.319	34.922	43.151	0.397	3.8	-5.46	-0.784	-50.11	1.406	198.8
250	14.771	35.429	5.21	14.733	26.362	34.982	43.227	0.485	5.8	-13.56	-1.889	-124.08	2.212	248.4
300	13.940	35.328	5.01	13.896	26.463	35.115	43.390	0.569	8.2	-18.14	-2.189	-177.30	2.644	298.1
350	13.418	35.269	5.16	13.368	26.527	35.199	43.494	0.650	10.9	-5.73	-0.568	-61.69	1.559	347.7
400	13.087	35.222	5.17	13.032	26.559	35.245	43.552	0.730	13.9	-3.88	-0.595	-28.09	1.052	397.3
450	12.701	35.160	5.14	12.639	26.590	35.291	43.613	0.809	17.3	-8.05	-1.252	-55.48	1.479	446.9
500	12.328	35.102	5.11	12.260	26.619	35.336	43.672	0.887	21.1	-10.71	-1.605	-75.09	1.721	496.5
600	11.323	34.960	5.05	11.246	26.700	35.460	43.836	1.039	29.6	-10.79	-1.391	-81.87	1.797	595.6
700	10.289	34.834	4.97	10.204	26.788	35.592	44.010	1.183	39.2	-10.28	-1.159	-79.95	1.775	694.7
800	8.848	34.683	4.84	8.759	26.909	35.778	44.256	1.319	49.5	-12.22	-1.143	-100.62	1.992	793.7
900	7.504	34.565	4.75	7.412	27.018	35.949	44.486	1.444	60.4	-14.56	-1.204	-115.83	2.137	892.6
1000	6.537	34.488	4.70	6.442	27.091	36.069	44.650	1.558	71.5	-9.62	-0.675	-76.12	1.732	991.5
1200	4.704	34.394	4.68	4.605	27.239	36.309	44.975	1.765	94.6	-7.62	-0.879	-80.57	1.782	1189.2
1400	3.629	34.443	4.33	3.523	27.391	36.516	45.234	1.938	117.6	-3.95	0.461	-70.86	1.671	1386.6
1600	3.061	34.533	4.14	2.944	27.517	36.671	45.416	2.083	139.7	-1.63	0.339	-30.56	1.233	1583.8
1800	2.761	34.608	4.12	2.631	27.605	36.774	45.534	2.210	161.7	-1.23	0.301	-32.17	1.126	1780.8
2000	2.552	34.665	4.19	2.407	27.670	36.851	45.621	2.324	183.7	-1.14	0.279	-29.93	1.086	1977.6
2200	2.361	34.706	4.35	2.201	27.720	36.911	45.691	2.426	205.6	-0.87	0.130	-17.80	0.838	2174.2
2400	2.184	34.728	4.43	2.010	27.753	36.954	45.744	2.522	228.0	-1.25	0.096	-20.37	0.896	2370.6
2600	1.972	34.737	4.49	1.783	27.778	36.991	45.793	2.611	250.8	-0.79	0.015	-10.12	0.632	2566.9
2800	1.816	34.740	4.56	1.811	27.793	37.016	45.826	2.698	274.6	-1.08	0.001	-12.85	0.712	2762.9
3000	1.633	34.738	4.64	1.413	27.806	37.040	45.861	2.780	299.0	-0.83	-0.012	-9.40	0.609	2958.8
3200	1.485	34.733	4.66	1.249	27.814	37.057	45.887	2.860	324.3	-1.08	-0.032	-11.32	0.668	3154.5
3400	1.287	34.726	4.71	1.036	27.823	37.078	45.919	2.937	350.1	-0.83	-0.026	-8.81	0.590	3350.0
3600	1.185	34.722	4.77	0.917	27.828	37.090	45.937	3.011	376.5	-0.44	-0.021	-4.41	0.417	3545.4
3800	1.154	34.720	4.78	0.866	27.829	37.094	45.944	3.085	404.3	-0.17	-0.006	-1.83	0.269	3740.5
4000	1.152	34.718	4.81	0.842	27.829	37.096	45.948	3.159	433.8	-0.11	0.002	-1.59	0.250	3935.5
4200	1.129	34.718	4.87	0.799	27.832	37.101	45.955	3.233	465.1	-0.49	-0.022	-5.45	0.463	4130.3
4400	1.074	34.715	4.89	0.723	27.834	37.107	45.965	3.308	497.6	-0.16	-0.007	-1.84	0.269	4325.0
4600	1.071	34.714	4.90	0.698	27.835	37.110	45.969	3.382	531.9	-0.18	-0.008	-1.84	0.000	4519.5
4813	1.072	34.713	4.89	0.698	27.835	37.110	45.969	3.387	534.2	-0.17	-0.007	-1.84	0.000	4532.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	1.5	19.033	19.033	24.795	33.278	41.396	34.713	35.633	5.30	2.20	0.19	0.10	0.01	2.116	1.214	1	222222222
23	104.3	15.732	15.715	26.247	34.830	43.041	35.563	35.532	5.35	3.30	0.44	4.00	0.02	2.264	1.176	103	222222222
22	203.5	15.193	15.162	26.323	34.926	43.156	35.500	35.496	5.35	3.80	0.46	4.30	0.01	2.357	1.299	201	222222222
21	304.7	14.270	14.228	26.392	35.032	43.295	35.326	35.373	5.12	4.50	0.65	7.20	0.01	2.010	1.216	302	222222222
20	501.8	12.784	12.715	26.529	35.228	43.548	35.101	35.170	5.12	5.10	0.86	10.50	0.01	2.108	1.103	497	222222222
19	699.5	10.394	10.309	26.769	35.569	43.983	34.834	34.859	4.94	6.10	1.22	16.50	0.01	1.305	0.702	692	222222222
18	899.9	7.635	7.543	27.000	35.925	44.456	34.565	34.576	4.72	16.90	1.71	24.10	0.01	0.751	0.367	891	222222222
17	1099.8	5.628	5.530	27.157	36.180	44.802	34.425	34.428	4.72	36.00	2.02	28.10	0.01	0.639	0.321	1088	222222222
15	1501.4	3.271	3.161	27.472	36.615	45.350	34.501	34.489	4.19	60.30	2.41	34.10	0.01			1484	222222255
14	1701.5	2.911	2.787	27.559	36.720	45.473	34.567	34.566	4.08	70.10	2.46	34.10	0.01			1681	222222255
13	1901.2	2.674	2.536	27.635	36.809	45.573	34.635	34.629	4.13	75.80	2.36	33.50	0.01			1878	222222255
12	2101.6	2.418	2.267	27.704	36.892	45.669	34.693	34.694	4.30	81.10	2.21	32.30	0.00	0.020		2075	222222225
11	2299.6	2.213	2.046	27.742	36.941	45.729	34.718	34.723	4.42	85.60	2.16	31.70	0.01			2269	222222255
10	2499.9	2.036	1.855	27.772	36.981	45.779	34.736	34.736	4.50	89.80	2.10	31.50	0.01			2466	222222255
9	2702.7	1.882	1.684	27.786	37.005	45.812	34.738	34.739	4.58	94.70	2.13	31.60	0.01			2664	222222255
7	3003.0	1.588	1.369	27.809	37.046	45.869	34.738	34.737	4.69	100.80	2.12	31.90	0.00			2958	222222255
6	3302.8	1.414	1.170	27.817	37.065	45.899	34.730	34.733	4.72	105.00	2.14	32.00	0.00	0.000	0.000	3252	222222222
5	3607.2	1.210	0.940	27.826	37.087	45.933	34.722	34.723	4.80	111.90	2.20	32.20	0.00			3549	222222255
4	3907.4	1.149	0.850	27.829	37.096	45.947	34.719	34.722	4.75	112.50	2.21	32.20	0.01			3842	222222255
3	4108.5	1.148	0.827	27.831	37.098	45.951	34.719	34.720	4.84	114.60	2.21	32.40	0.01			4037	222222255
2	4311.8	1.078	1.036	27.834	37.107	45.964	34.716		4.88	116.90	2.21	32.50	0.00	0.013		4235	252222225
1	4511.7	1.076	0.713	27.835	37.109	45.968	34.715	34.716	4.88	117.10	2.27	32.50	0.00	0.010		4430	222222225

CRUISE: CD 29 STA: 42 DATE (D/M/Y): 24-11-87 TIME: 2148 LAT: 34 0.73 S LONG: 54 7.11 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81579E-04 1/S SOUND SPEED= 1504.2 M/S Depth= 4393 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.701	35.607	5.04	19.701	25.305	33.757	41.844	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.701	35.607	5.04	19.701	25.305	33.757	41.845	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	18.130	35.576	5.50	18.126	25.683	34.185	42.320	0.050	0.0	-73.01	-1.377	-1362.74	7.329	19.9
30	17.499	35.556	5.48	17.494	25.823	34.346	42.500	0.072	0.1	-32.93	-2.628	-478.72	4.344	29.8
40	17.066	35.536	5.57	17.059	25.912	34.450	42.618	0.094	0.2	-55.38	-1.160	-988.12	6.241	39.8
50	16.586	35.527	5.67	16.578	26.020	34.574	42.757	0.114	0.3	-35.94	-0.309	-657.50	5.091	49.7
100	15.755	35.531	5.11	15.740	26.216	34.799	43.009	0.208	1.0	-10.53	-0.609	-154.89	2.471	99.4
125	15.454	35.508	5.10	15.435	26.268	34.861	43.082	0.253	1.5	-14.16	-1.118	-184.91	2.700	124.3
150	15.107	35.478	5.09	15.084	26.323	34.929	43.162	0.297	2.1	-10.60	-1.115	-117.48	2.152	149.1
200	14.652	35.421	5.14	14.622	26.380	35.004	43.253	0.383	3.7	-6.49	-0.648	-74.49	1.714	198.8
250	14.277	35.386	5.13	14.241	26.435	35.074	43.336	0.468	5.6	-11.35	-1.339	-115.13	2.130	248.4
300	13.890	35.337	5.17	13.847	26.480	35.134	43.410	0.550	7.9	-3.61	-0.457	-33.89	1.156	298.0
350	13.634	35.302	5.18	13.584	26.508	35.172	43.458	0.631	10.6	-6.26	-0.835	-55.34	1.477	347.7
400	13.332	35.259	5.21	13.276	26.538	35.214	43.512	0.712	13.7	-9.27	-1.344	-73.34	1.700	397.3
450	12.942	35.200	5.14	12.880	26.572	35.264	43.577	0.791	17.1	-6.50	-1.034	-44.23	1.321	446.9
500	12.570	35.140	5.15	12.502	26.601	35.308	43.635	0.870	20.9	-7.43	-1.151	-50.97	1.418	496.5
600	11.721	35.014	5.08	11.643	26.668	35.411	43.772	1.025	29.6	-11.11	-1.498	-84.07	1.820	595.6
700	10.650	34.876	4.99	10.563	26.758	35.547	43.950	1.173	39.4	-11.22	-1.325	-88.36	1.866	694.7
800	9.483	34.747	4.89	9.391	26.857	35.697	44.149	1.313	50.1	-12.57	-1.271	-102.58	2.011	793.7
900	7.808	34.589	4.75	7.715	26.994	35.911	44.434	1.442	61.3	-18.09	-1.543	-143.75	2.381	892.6
1000	6.051	34.460	4.69	5.960	27.131	36.132	44.735	1.556	72.4	-11.44	-0.741	-93.87	1.924	991.5
1200	4.729	34.394	4.72	4.630	27.236	36.305	44.970	1.758	94.9	-5.83	-0.843	-61.94	1.563	1189.2
1400	3.601	34.445	4.33	3.495	27.395	36.521	45.240	1.932	118.0	-3.70	0.405	-65.07	1.602	1386.6
1600	3.098	34.522	4.16	2.980	27.506	36.657	45.401	2.079	140.5	-1.99	0.418	-47.28	1.365	1583.8
1800	2.764	34.606	4.13	2.634	27.604	36.773	45.533	2.207	162.7	-1.65	0.406	-43.17	1.305	1780.8
2000	2.497	34.672	4.24	2.353	27.680	36.864	45.637	2.318	184.2	-0.89	0.196	-22.03	0.932	1977.6
2200	2.349	34.703	4.29	2.190	27.718	36.910	45.691	2.421	206.1	-0.92	0.148	-19.51	0.877	2174.2
2400	2.172	34.725	4.39	1.990	27.752	36.954	45.744	2.517	228.6	-1.12	0.091	-18.44	0.853	2370.6
2600	2.010	34.736	4.47	1.820	27.774	36.986	45.785	2.607	251.5	-0.99	0.024	-13.04	0.717	2568.9
2800	1.787	34.737	4.53	1.583	27.793	37.018	45.830	2.693	275.2	-0.84	-0.007	-9.60	0.615	2762.9
3000	1.702	34.736	4.57	1.480	27.800	37.030	45.848	2.776	299.9	-0.85	-0.012	-9.52	0.613	2958.8
3200	1.530	34.733	4.66	1.293	27.811	37.052	45.879	2.858	325.6	-1.00	-0.025	-10.87	0.655	3154.5
3400	1.390	34.729	4.71	1.136	27.818	37.068	45.904	2.936	352.0	-0.65	-0.020	-7.03	0.526	3350.0
3600	1.278	34.725	4.75	1.007	27.824	37.081	45.924	3.013	379.4	-0.78	-0.027	-8.46	0.578	3545.4
3800	1.169	34.720	4.80	0.880	27.828	37.093	45.942	3.087	407.6	-0.42	-0.016	-4.54	0.423	3740.5
4000	1.133	34.718	4.83	0.824	27.830	37.098	45.950	3.161	437.0	-0.31	-0.012	-3.51	0.372	3935.5
4200	1.092	34.715	4.86	0.763	27.832	37.103	45.959	3.235	467.8	-0.18	-0.008	-2.10	0.288	4130.3
4400	1.088	34.714	4.87	0.737	27.833	37.106	45.963	3.309	500.4	-0.08	-0.004	-2.10	0.000	4325.0
4455	1.093	34.714	4.88	0.736	27.833	37.106	45.963	3.330	509.7	-0.08	-0.005	-2.10	0.000	4378.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	13.5	18.643	18.641	25.551	34.036	42.158	35.572	35.588	5.50	2.00	0.22	0.00	0.02			13	222222255
23	102.9	15.895	15.879	26.184	34.762	42.968	35.530	35.541	5.39	3.04	0.43	3.70	0.06			102	222222255
22	203.6	14.857	14.827	26.335	34.951	43.193	35.420	35.444	5.23	3.75	0.56	5.70	0.01			201	222222255
21	302.9	14.174	14.130	26.420	35.063	43.330	35.336	35.372	5.15	3.59	0.64	7.20	0.00			300	222222255
20	450.9	13.085	13.022	26.542	35.229	43.536	35.198	35.223	5.22	4.29	0.78	9.50	0.02			446	222222255
19	601.1	11.364	11.287	26.734	35.491	43.865	35.013	34.968	5.04	5.51	1.07	14.10	0.01			595	222222255
18	699.0	10.504	10.418	26.785	35.580	43.989	34.878	34.864	4.99	7.58	1.22	16.10	0.01			693	222222255
17	850.7	8.978	8.882	26.889	35.752	44.226	34.683	34.695	4.80	11.36	1.50	21.10	0.00			842	222222255
16	1001.0	6.174	6.082	27.113	36.109	44.706	34.457	34.468	4.71	23.91	2.01	27.50	-0.01			990	222222255
14	1400.7	3.527	3.422	27.402	36.532	45.255	34.445	34.452	4.27	54.51	2.42	33.60	0.02			1385	222222255
13	1498.3	3.176	3.066	27.467	36.615	45.355	34.484	34.502	4.16	62.07	2.45	33.90	0.00			1481	222222255
12	1699.8	2.848	2.725	27.563	36.727	45.483	34.565	34.582	4.09	70.86	2.43	33.60	0.01			1679	222222255
11	1900.6	2.586	2.450	27.650	36.829	45.597	34.645	34.650	4.19	76.71	2.36	32.70	0.00			1877	222222255
10	2100.0	2.401	2.249	27.702	36.890	45.668	34.688	34.693	4.30	81.02	2.31	32.20	0.00			2073	222222255
9	2299.6	2.243	2.076	27.737	36.935	45.721	34.715	34.719	4.38	83.79	2.27	31.50	0.00			2269	222222255
8	2500.2	2.025	1.844	27.770	36.980	45.779	34.733	34.738	4.47	91.02	2.24	31.50	0.00			2466	222222255
7	2700.6	1.848	1.651	27.789	37.009	45.818	34.738	34.736	4.52	96.37	2.27	31.60	0.01			2662	222222255
6	3003.6	1.682	1.461	27.801	37.033	45.851	34.736	34.739	4.61	99.81	2.24	31.60	0.00			2959	222222255
5	3303.9	1.433	1.188	27.816	37.062	45.895	34.730	34.726	4.71	106.88	2.29	31.80	0.01			3253	222222255
4	3604.6	1.279	1.008	27.824	37.081	45.923	34.725	34.728	4.78	110.86	2.25	31.60	0.01			3546	222222255
3	3907.1	1.135	0.836	27.830	37.097	45.949	34.719	34.719	4.82	115.00	2.30	32.10	-0.06			3841	222222255
2	4208.3	1.082	0.752	27.832	37.104	45.961	34.715	34.714	4.85	117.08	2.29	32.10	-0.01	0.014		4135	222222255
1	4459.4	1.093	0.735	27.833	37.106	45.963	34.714	34.714	4.85	117.61	2.30	32.20	0.00	0.016	0.000	4379	222222255

CRUISE: CD 29 STA: 43 DATE (D/M/Y): 25-11-87 TIME: 0919 LAT: 33 59.46 S LONG: 55 46.98 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81535E-04 1/S SOUND SPEED= 1504.0 M/S Depth= 4291 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.475	35.226	5.49	19.475	25.073	33.536	41.635	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.475	35.226	5.49	19.475	25.073	33.536	41.635	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.109	35.471	5.47	18.105	25.608	34.112	42.248	0.052	0.1	-6.00	5.636	-463.96	4.278	19.9
30	18.057	35.515	5.59	18.052	25.655	34.160	42.297	0.076	0.1	-3.80	3.013	-259.80	3.201	29.8
40	18.028	35.541	5.59	18.021	25.682	34.188	42.326	0.099	0.2	-3.93	2.280	-217.31	2.928	39.8
50	18.001	35.560	5.49	17.993	25.704	34.210	42.349	0.122	0.3	-1.34	1.357	-109.58	2.079	49.7
100	16.748	35.562	5.67	16.731	26.010	34.558	42.736	0.231	1.1	-30.51	-0.751	-531.65	4.579	99.4
125	15.906	35.531	5.54	15.886	26.183	34.761	42.967	0.280	1.7	-23.08	-0.720	-413.19	4.037	124.3
150	15.644	35.525	5.45	15.621	26.239	34.826	43.040	0.326	2.3	-8.96	-0.253	-146.43	2.403	149.1
200	15.295	35.505	5.40	15.264	26.304	34.903	43.130	0.416	3.9	-6.45	-0.606	-79.44	1.778	198.8
250	14.901	35.448	5.35	14.864	26.348	34.953	43.203	0.504	6.0	-9.18	-1.406	-76.90	1.742	248.4
300	14.343	35.368	5.24	14.299	26.409	35.045	43.306	0.590	8.4	-10.25	-1.318	-98.13	1.967	298.1
350	13.789	35.308	5.16	13.739	26.481	35.139	43.419	0.674	11.1	-7.21	-0.476	-94.66	1.932	347.7
400	13.476	35.275	5.24	13.419	26.522	35.192	43.485	0.756	14.3	-8.61	-1.134	-75.95	1.731	397.3
450	13.070	35.218	5.27	13.007	26.561	35.248	43.555	0.836	17.7	-9.63	-1.462	-70.47	1.667	446.9
500	12.556	35.138	5.22	12.488	26.602	35.310	43.638	0.915	21.6	-11.16	-1.715	-77.59	1.749	496.5
600	11.458	34.978	5.08	11.381	26.689	35.443	43.814	1.068	30.2	-13.62	-1.800	-103.15	2.017	595.6
700	10.264	34.831	4.99	10.179	26.790	35.595	44.014	1.214	39.8	-12.42	-1.407	-96.97	1.956	694.7
800	9.196	34.718	4.89	9.106	26.881	35.734	44.198	1.350	50.2	-10.70	-1.024	-87.42	1.857	793.7
900	8.247	34.627	4.81	8.151	26.959	35.855	44.360	1.478	61.4	-9.21	-0.818	-71.76	1.682	892.7
1000	6.654	34.496	4.71	6.558	27.082	36.054	44.629	1.598	73.0	-17.08	-1.220	-137.09	2.325	991.6
1200	4.502	34.394	4.64	4.405	27.261	36.341	45.017	1.801	95.7	-7.56	0.029	-85.36	1.835	1189.2
1400	3.429	34.457	4.30	3.325	27.422	36.556	45.284	1.969	117.9	-3.40	0.410	-61.64	1.559	1386.6
1600	2.932	34.553	4.15	2.817	27.545	36.705	45.456	2.110	139.4	-2.08	0.471	-51.44	1.424	1583.8
1800	2.446	34.629	4.17	2.518	27.631	36.806	45.572	2.231	160.3	-1.26	0.312	-32.96	1.140	1780.8
2000	2.420	34.691	4.23	2.277	27.702	36.889	45.666	2.338	181.0	-1.08	0.269	-28.68	1.064	1977.6
2200	2.278	34.719	4.32	2.120	27.737	36.932	45.716	2.435	201.7	-0.74	0.088	-13.73	0.736	2174.2
2400	2.151	34.735	4.37	1.977	27.761	36.964	45.755	2.527	223.4	-0.69	0.051	-10.96	0.657	2370.6
2600	2.038	34.742	4.42	1.848	27.777	36.986	45.784	2.617	246.3	-0.61	0.027	-8.82	0.590	2566.9
2800	1.880	34.745	4.48	1.674	27.793	37.012	45.819	2.704	270.3	-0.95	-0.003	-11.22	0.665	2762.9
3000	1.738	34.742	4.52	1.516	27.802	37.031	45.846	2.788	295.2	-1.02	-0.020	-11.10	0.662	2950.8
3200	1.538	34.737	4.59	1.301	27.813	37.054	45.880	2.869	320.9	-0.84	-0.023	-9.05	0.597	3154.5
3400	1.437	34.733	4.65	1.182	27.818	37.065	45.899	2.948	347.4	-1.09	-0.036	-11.63	0.677	3350.0
3600	1.280	34.727	4.68	1.009	27.826	37.083	45.925	3.024	374.6	-0.28	-0.009	-3.04	0.346	3545.4
3800	1.271	34.726	4.76	0.980	27.826	37.085	45.929	3.100	403.3	-0.10	-0.006	-1.03	0.201	3740.5
4000	1.272	34.725	4.76	0.959	27.827	37.087	45.932	3.177	434.0	-0.07	-0.004	-0.69	0.165	3935.5
4200	1.283	34.724	4.83	0.949	27.827	37.087	45.933	3.256	466.7	-0.06	-0.004	-0.66	0.162	4130.4
4387	1.295	34.724	4.80	0.939	27.827	37.088	45.934	3.330	499.2	-0.05	-0.002	-0.66	0.000	4312.4

BOTL NO.	PRES DBAR	CTDMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	13.5	18.721	18.719	25.417	33.902	42.021	35.423	35.604	5.55	2.18	0.21	0.10	0.03			13	222222255
23	103.2	15.455	15.439	26.308	34.900	43.120	35.561	35.516	5.44	3.26	0.44	3.70	0.03	2.149	1.269	102	222222222
22	203.2	14.941	14.910	26.379	34.991	43.229	35.501	35.452	5.32	3.01	0.53	5.30	0.02	2.402	1.413	201	222222222
21	302.5	14.087	14.043	26.457	35.103	43.372	35.360	35.337	5.20	4.36	0.69	7.60	0.04	2.122	1.158	299	222222222
20	451.9	13.132	13.069	26.548	35.232	43.538	35.217	35.229	5.22	4.56	0.78	9.50	-0.01	1.893	1.119	447	222222222
19	600.2	11.833	11.754	26.618	35.357	43.714	34.976	35.037	5.07	5.81	1.00	12.80	0.00	1.710	0.897	594	222222222
18	750.5	9.881	9.792	26.795	35.618	44.053	34.753	34.785	4.95	8.96	1.34	18.00	0.00	1.087	0.672	743	222222222
17	901.6	7.336	7.246	27.091	36.029	44.572	34.627	34.554	4.75	10.21	1.78	24.00	0.01			892	222222255
16	998.7	6.293	6.208	27.129	36.118	44.710	34.496		4.77	22.58	1.91	26.50	0.00			988	252222255
15	1197.8	4.366	4.356	27.277	36.363	45.045	34.395		4.64	38.59	2.28	31.60	0.01	0.509	0.289	1185	252222222
14	1398.1	3.347	3.244	27.429	36.568	45.299	34.457	34.468	4.27	57.73	2.42	33.00	0.00	0.232		1382	222222225
13	1599.4	2.910	2.795	27.546	36.707	45.460	34.552	34.562	4.13	68.00	2.44	34.10	0.00			1581	222222255
12	1799.1	2.631	2.502	27.632	36.807	45.574	34.627	34.629	4.16	75.06	2.39	33.40	0.00			1777	222222255
11	2000.5	2.477	2.333	27.698	36.802	45.656	34.692	34.678	4.23	80.59	2.33	32.70	-0.01			1975	222222255
10	2203.5	2.310	2.151	27.734	36.928	45.710	34.719	34.714	4.31	86.18	2.33	32.20	0.01			2175	222222255
9	2400.0	2.105	1.990	27.759	36.961	45.752	34.734	34.735	4.39	90.56	2.28	31.00	-0.01			2368	222222255
8	2594.4	2.029	1.839	27.777	36.987	45.786	34.741	34.739	4.42	95.63	2.28	32.00	0.00			2558	222222255
7	2802.3	1.871	1.664	27.793	37.013	45.821	34.745	34.744	4.50	99.14	2.27	31.00	0.00			2762	222222255
6	3003.1	1.738	1.515	27.802	37.030	45.846	34.742	34.742	4.57	101.78	2.28	31.00	0.00			2959	222222255
5	3304.7	1.501	1.254	27.815	37.050	45.887	34.735	34.736	100.95	2.32	32.20	-0.01				3253	225222255
3	3905.1	1.271	0.968	27.827	37.086	45.930	34.725	34.723	4.77	113.02	2.30	32.30	0.00			3839	222222255
2	4207.6	1.205	0.949	27.827	37.087	45.933	34.724	34.723	4.80	112.52	2.29	32.10	-0.02	0.012		4134	222222225
1	4389.8	1.295	0.939	27.827	37.088	45.934	34.723	34.723	4.70	113.09	2.30	32.30	0.00	0.019	0.000	4311	222222222

CRUISE: CD 29 STA: 44 DATE (D/M/Y): 25-11-87 TIME: 1945 LAT: 33 58.35 S LONG: 57 2.06 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81496E-04 1/S SOUND SPEED= 1588.1 M/S Depth= 5129 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.944	35.610	5.39	18.944	25.503	33.978	42.088	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.944	35.610	5.39	18.943	25.503	33.978	42.088	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.988	35.592	5.73	17.985	25.731	34.237	42.376	0.047	0.0	-33.04	0.375	-675.53	5.163	19.9
30	17.761	35.595	5.76	17.756	25.789	34.302	42.448	0.070	0.1	-20.04	0.051	-395.87	5.952	29.8
40	17.563	35.594	5.73	17.557	25.837	34.357	42.509	0.091	0.2	-12.14	-0.169	-226.34	2.989	39.8
50	17.476	35.592	5.73	17.468	25.857	34.380	42.535	0.113	0.3	-30.53	-0.560	-557.42	4.690	49.7
100	16.145	35.545	5.65	16.129	26.138	34.707	42.904	0.214	1.0	-16.84	-0.376	-290.16	3.384	99.4
125	15.843	35.538	5.50	15.824	26.203	34.782	42.990	0.260	1.6	-9.80	-0.542	-139.86	2.349	124.3
150	15.551	35.519	5.49	15.527	26.256	34.846	43.063	0.306	2.2	-19.91	-1.819	-242.93	3.096	149.1
200	14.734	35.437	5.24	14.704	26.375	34.995	43.241	0.393	3.8	-11.37	-1.170	-128.49	2.252	198.8
250	14.233	35.403	5.51	14.196	26.458	35.097	43.361	0.477	5.7	-6.10	-0.510	-74.53	1.715	248.4
300	14.044	35.379	5.52	14.000	26.481	35.128	43.399	0.559	8.0	-5.41	-0.918	-36.60	1.202	298.1
350	13.557	35.298	5.35	13.507	26.521	35.188	43.477	0.640	10.7	-6.76	-0.865	-61.60	1.559	347.7
400	13.311	35.264	5.37	13.255	26.547	35.223	43.522	0.720	13.7	-7.03	-1.070	-52.34	1.437	397.3
450	12.909	35.197	5.30	12.847	26.577	35.270	43.584	0.799	17.2	-9.01	-1.493	-57.47	1.506	446.9
500	12.541	35.136	5.24	12.473	26.604	35.312	43.641	0.877	21.0	-9.37	-1.481	-61.74	1.561	496.5
600	11.586	34.993	5.14	11.508	26.677	35.426	43.791	1.031	29.6	-8.87	-1.215	-63.90	1.588	595.6
700	10.400	34.846	5.01	10.315	26.777	35.577	43.991	1.178	39.3	-11.82	-1.349	-92.77	1.913	694.7
800	9.213	34.717	4.89	9.122	26.877	35.729	44.192	1.316	49.9	-11.96	-1.172	-95.90	1.945	793.7
900	7.780	34.585	4.76	7.687	26.994	35.913	44.437	1.444	60.9	-14.12	-1.226	-112.16	2.104	892.6
1000	6.622	34.494	4.69	6.526	27.085	36.059	44.635	1.561	72.3	-15.31	-1.014	-126.23	2.232	991.5
1200	4.615	34.401	4.60	4.517	27.254	36.328	44.999	1.764	95.0	-6.83	-0.010	-75.08	1.721	1189.2
1400	3.532	34.451	4.26	3.427	27.407	36.536	45.259	1.934	117.5	-3.65	0.436	-66.09	1.615	1386.6
1600	2.938	34.549	4.08	2.822	27.541	36.701	45.452	2.076	139.2	-2.30	0.432	-51.34	1.423	1583.8
1800	2.663	34.626	4.00	2.534	27.628	36.802	45.566	2.197	160.2	-1.05	0.312	-30.78	1.102	1780.8
2000	2.476	34.677	4.14	2.332	27.686	36.870	45.644	2.306	181.3	-0.96	0.196	-22.72	0.947	1977.6
2200	2.322	34.709	4.21	2.163	27.725	36.918	45.700	2.407	202.9	-0.84	0.127	-17.29	0.826	2174.2
2400	2.183	34.728	4.27	2.008	27.753	36.954	45.744	2.502	225.1	-0.81	0.083	-14.43	0.755	2370.6
2600	2.057	34.740	4.36	1.866	27.774	36.983	45.780	2.593	248.3	-0.72	0.034	-10.50	0.644	2566.9
2800	1.903	34.743	4.38	1.697	27.789	37.007	45.813	2.681	272.6	-0.86	0.006	-10.71	0.650	2762.9
3000	1.750	34.741	4.45	1.528	27.801	37.028	45.843	2.766	297.8	-0.94	-0.021	-10.14	0.633	2958.8
3200	1.609	34.736	4.48	1.370	27.808	37.044	45.867	2.849	323.9	-0.77	-0.024	-8.10	0.566	3154.5
3400	1.439	34.732	4.58	1.184	27.817	37.064	45.897	2.930	351.1	-1.38	-0.033	-15.42	0.780	3350.0
3600	1.194	34.724	4.74	0.925	27.829	37.091	45.938	3.006	378.2	-1.18	-0.036	-12.91	0.714	3545.4
3800	0.916	34.712	4.86	0.634	27.837	37.116	45.979	3.077	405.0	-1.59	-0.078	-16.17	0.799	3740.0
4000	0.797	34.705	4.92	0.498	27.840	37.127	45.997	3.143	431.2	-0.32	-0.015	-3.41	0.367	3935.5
4200	0.747	34.702	4.94	0.428	27.841	37.132	46.006	3.208	458.6	-0.40	-0.020	-4.23	0.408	4130.3
4400	0.718	34.699	4.97	0.378	27.842	37.136	46.013	3.273	487.0	-0.10	-0.004	-1.09	0.207	4325.0
4600	0.699	34.697	5.01	0.337	27.843	37.139	46.018	3.338	516.8	-0.27	-0.013	-3.16	0.353	4519.4
4800	0.649	34.694	5.04	0.267	27.844	37.145	46.028	3.403	547.9	-0.53	-0.029	-6.09	0.490	4713.7
5000	0.620	34.691	5.05	0.216	27.845	37.148	46.034	3.466	579.7	-0.03	-0.002	-0.36	0.120	4907.9
5200	0.636	34.691	5.05	0.208	27.845	37.149	46.035	3.531	613.2	-0.04	-0.001	-0.36	0.080	5101.8
5207	0.637	34.691	5.05	0.207	27.845	37.149	46.035	3.533	614.5	-0.04	-0.001	-0.36	0.080	5106.6

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
23	249.3	14.374	14.337	26.428	35.063	43.322	35.404	35.399	5.23	3.51	0.61	6.70	0.01			247	222222255
22	399.4	13.391	13.334	26.532	35.205	43.501	35.266	35.277	5.32	3.85	0.73	8.50	0.02	2.083	1.163	395	222222222
21	500.7	12.358	12.290	26.639	35.354	43.689	35.135	35.104	5.20	4.71	0.91	11.40	0.01	1.882	1.057	496	222222222
20	599.3	11.385	11.309	26.714	35.471	43.844	34.993	34.969	5.12	5.58	1.08	14.10	0.01	1.462	0.829	593	222222222
19	799.3	8.805	8.717	26.942	35.812	44.292	34.717	34.676	4.85	11.57	1.53	21.40	0.02	0.975	0.461	791	222222222
18	998.2	6.010	5.919	27.164	36.167	44.771	34.495	34.457	4.73	24.43	1.98	28.10	0.00	0.572	0.338	988	222222222
17	1199.8	4.446	4.350	27.272	36.354	45.033	34.400	34.401	4.60	38.29	2.20	31.90	0.00	0.431	0.237	1187	222222222
15	1599.1	3.096	2.979	27.527	36.679	45.422	34.549	34.525	4.09	65.71	2.45	34.50	0.00	0.091	0.072	1500	222222222
14	1696.7	2.837	2.715	27.581	36.746	45.502	34.587	34.569	4.05	70.86	2.44	34.70	0.01	0.056	0.048	1676	222222222
13	1998.2	2.500	2.355	27.684	36.867	45.640	34.677	34.670	4.13	82.51	2.44	33.60	-0.01			1973	222222255
12	2300.8	2.248	2.081	27.740	36.937	45.724	34.719	34.721	4.22	91.78	2.36	32.90	0.03	0.047		2270	222222225
11	2599.7	2.101	1.909	27.771	36.977	45.772	34.740	34.735	4.36	94.08	2.32	32.50	0.00			2563	222222255
10	2903.0	1.845	1.630	27.794	37.016	45.826	34.743	34.742	4.42	102.08	2.29	32.60	0.01			2861	222222255
9	3204.3	1.571	1.333	27.810	37.049	45.874	34.736	34.733	4.52	111.35	2.29	33.00	0.00			3155	222222255
8	3504.4	1.267	1.006	27.826	37.084	45.926	34.728	34.727	4.75	112.57	2.32	32.70	0.00	0.017		3448	222222225
7	3807.4	0.813	0.534	27.843	37.127	45.995	34.711	34.706	4.95	123.39	2.28	33.10	0.01			3744	222222255
6	4107.2	0.775	0.754	27.840	37.129	46.001	34.703		4.95		2.29					4036	252525555
5	4410.7	0.715	0.375	27.842	37.136	46.014	34.699	34.700	4.99	127.36	2.33	33.40	0.00	0.034	0.015	4332	222222222
4	4753.0	0.666	0.289	27.844	37.143	46.025	34.695	34.694	5.02	128.24	2.33	33.40	0.01	0.036	0.032	4664	222222222
3	5113.0	0.629	0.211	27.845	37.149	46.035	34.691	34.691	5.05					0.058	0.027	5013	222555522
2	5200.8	0.636	0.207	27.846	37.149	46.036	34.691	34.691	5.04	132.20	2.35	33.70	0.01	0.020		5106	222222225

CRUISE: CD 29 STA: 45 DATE (D/M/Y): 26-11-87 TIME: 0221 LAT: 33 59.68 S LONG: 57 29.09 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81543E-04 1/S SOUND SPEED= 1509.4 M/S Depth= 5299 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.143	35.629	5.51	19.143	25.467	33.935	42.039	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.143	35.629	5.51	19.143	25.467	33.935	42.039	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.163	35.609	5.56	18.160	25.700	34.200	42.334	0.040	0.0	4.69	0.298	75.28	-1.723	19.9
30	17.985	35.609	5.60	17.980	25.745	34.251	42.390	0.071	0.1	-50.86	-0.208	-986.68	6.238	29.8
40	17.552	35.608	5.64	17.545	25.850	34.370	42.523	0.093	0.2	-18.66	-0.247	-348.81	3.709	39.8
50	17.390	35.603	5.63	17.382	25.887	34.412	42.569	0.114	0.3	-7.80	-0.256	-135.67	2.313	49.7
100	16.465	35.561	5.62	16.449	26.076	34.634	42.821	0.217	1.1	-20.70	-0.794	-341.66	3.671	99.4
125	16.090	35.549	5.43	16.070	26.155	34.725	42.925	0.265	1.6	-11.90	-0.464	-194.24	2.768	124.3
150	15.781	35.533	5.38	15.757	26.214	34.796	43.006	0.312	2.3	-16.22	-1.212	-222.55	2.963	149.1
200	15.182	35.484	5.13	15.152	26.312	34.916	43.147	0.402	3.9	-13.09	-1.234	-159.04	2.504	198.8
250	14.604	35.427	5.14	14.566	26.397	35.023	43.274	0.488	5.9	-10.61	-1.110	-118.38	2.161	248.4
300	14.106	35.368	5.18	14.064	26.459	35.104	43.372	0.572	8.2	-9.38	-1.198	-88.40	1.867	298.1
350	13.661	35.307	5.33	13.611	26.507	35.169	43.454	0.653	10.9	-5.82	-0.856	-46.64	1.356	347.7
400	13.420	35.278	5.26	13.364	26.535	35.200	43.502	0.734	14.0	-6.86	-1.016	-53.30	1.450	397.3
450	13.007	35.212	5.24	12.944	26.569	35.258	43.568	0.814	17.5	-7.41	-1.207	-49.26	1.394	446.9
500	12.635	35.151	5.22	12.567	26.597	35.301	43.626	0.893	21.3	-8.92	-1.380	-61.59	1.559	496.5
600	11.404	34.972	5.13	11.327	26.695	35.451	43.824	1.046	29.9	-12.45	-1.660	-94.00	1.926	595.6
700	10.353	34.840	5.03	10.268	26.781	35.583	43.998	1.192	39.5	-12.40	-1.417	-97.39	1.960	694.7
800	9.173	34.713	4.91	9.083	26.881	35.735	44.199	1.329	50.0	-13.39	-1.312	-107.12	2.055	793.7
900	7.658	34.575	4.78	7.565	27.004	35.928	44.458	1.456	61.0	-15.42	-1.269	-123.59	2.208	892.7
1000	6.534	34.489	4.69	6.439	27.092	36.070	44.651	1.571	72.1	-9.74	-0.656	-78.03	1.754	991.6
1200	4.575	34.398	4.58	4.477	27.257	36.333	45.005	1.775	95.0	-7.74	-0.096	-80.17	1.778	1189.2
1400	3.494	34.456	4.26	3.390	27.415	36.546	45.270	1.946	117.5	-3.49	0.501	-60.45	1.643	1386.6
1600	3.026	34.543	4.13	2.909	27.528	36.683	45.430	2.088	139.3	-1.74	0.388	-42.79	1.299	1583.8
1800	2.732	34.602	4.11	2.602	27.603	36.773	45.535	2.213	161.0	-1.38	0.279	-32.16	1.126	1780.8
2000	2.499	34.664	4.21	2.355	27.674	36.857	45.630	2.325	182.7	-1.02	0.226	-25.30	0.999	1977.6
2200	2.330	34.704	4.30	2.171	27.721	36.913	45.695	2.428	204.6	-0.89	0.172	-20.71	0.904	2174.2
2400	2.193	34.727	4.34	2.018	27.752	36.952	45.742	2.524	227.1	-0.73	0.103	-14.91	0.767	2370.6
2600	2.006	34.739	4.39	1.896	27.771	36.978	45.773	2.615	250.5	-0.73	0.018	-9.65	0.617	2566.9
2800	1.945	34.741	4.44	1.738	27.785	37.001	45.804	2.705	275.1	-0.83	0.025	-11.60	0.676	2762.9
3000	1.768	34.739	4.51	1.545	27.797	37.024	45.838	2.791	300.6	-1.01	-0.020	-10.96	0.657	2958.0
3200	1.580	34.736	4.59	1.341	27.810	37.048	45.873	2.874	326.7	-0.89	-0.011	-10.38	0.640	3154.5
3400	1.414	34.730	4.65	1.160	27.818	37.066	45.900	2.953	353.4	-0.97	-0.037	-9.97	0.627	3350.0
3600	1.213	34.722	4.73	0.943	27.826	37.086	45.932	3.029	380.6	-1.42	-0.060	-14.53	0.757	3545.4
3800	0.870	34.707	4.85	0.590	27.836	37.117	45.983	3.100	407.1	-1.58	-0.072	-16.21	0.800	3740.5
4000	0.681	34.698	4.92	0.385	27.841	37.135	46.011	3.164	433.0	-0.80	-0.032	-8.60	0.502	3935.5
4200	0.557	34.691	4.98	0.244	27.844	37.145	46.030	3.226	458.8	-0.49	-0.023	-5.20	0.453	4130.3
4400	0.519	34.688	5.02	0.185	27.844	37.150	46.037	3.286	485.2	-0.22	-0.011	-2.43	0.309	4325.0
4600	0.511	34.687	5.04	0.156	27.845	37.152	46.041	3.346	512.0	-0.11	-0.007	-1.22	0.219	4519.4
4800	0.514	34.686	5.07	0.136	27.845	37.153	46.044	3.407	541.8	-0.06	-0.003	-0.67	0.163	4713.7
5000	0.527	34.685	5.09	0.126	27.846	37.154	46.045	3.468	572.3	-0.06	-0.003	-0.72	0.169	4907.9
5200	0.540	34.685	5.12	0.115	27.845	37.155	46.046	3.530	604.5	-0.03	-0.002	-0.38	0.122	5101.8
5400	0.562	34.684	5.14	0.112	27.845	37.155	46.047	3.593	638.5	-0.01	-0.001	-0.38	0.000	5295.6
5433	0.566	34.684	5.12	0.112	27.845	37.155	46.047	3.603	644.3	-0.01	-0.001	-0.38	0.000	5327.6

BOTL NO.	PRES DBAR	CTDTP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUAL1
24	11.4	18.454	18.452	25.624	34.115	42.239	35.005	35.614	5.56	1.94	0.20	0.20	0.01			11	222222255
23	102.9	16.123	16.106	26.156	34.725	42.923	35.561	35.552	5.50	2.28	0.32	1.60	0.25			102	222222255
22	205.6	14.720	14.701	26.407	35.028	43.274	35.475		5.17	3.32	0.55	6.10	0.01			203	252222255
21	303.5	14.053	14.009	26.468	35.115	43.386	35.365	35.361	5.22	3.49	0.61	7.30	0.00			300	222222255
20	402.2	13.418	13.361	26.534	35.206	43.501	35.276	35.268	5.23	3.84	0.71	8.80	-0.01			398	222222255
19	501.6	12.746	12.677	26.574	35.274	43.595	35.150	35.169	5.22	4.36	0.81	10.50	0.01			497	222222255
18	700.4	10.624	10.530	26.732	35.923	43.920	34.830	34.800	5.00	6.92	1.12	15.90	-0.01			693	222222255
17	900.5	7.474	7.383	27.030	35.962	44.500	34.574	34.557	4.75	17.00	1.73	24.60	0.00			891	222222255
16	1101.3	5.300	5.205	27.193	36.231	44.869	34.421	34.417	4.73	29.46	2.07	29.70	0.01			1089	222222255
15	1301.2	3.923	3.822	27.333	36.442	45.146	34.407	34.417	4.42	46.53	2.30	32.90	0.00			1287	222222255
14	1501.2	3.218	3.108	27.479	36.625	45.362	34.504	34.505	4.12	62.76	2.41	34.30	0.01			1484	222222255
13	1699.8	2.849	2.726	27.574	36.738	45.494	34.579	34.588	4.08	71.80	2.38	34.10	0.02			1679	222222255
12	1999.9	2.532	2.387	27.672	36.853	45.625	34.665	34.663	4.18	79.49	2.32	33.30	0.00			1975	222222255
11	2302.6	2.295	2.127	27.738	36.930	45.714	34.718	34.710	4.34	85.48	2.27	32.30	0.01			2272	222222255
10	2602.0	2.099	1.907	27.770	36.976	45.771	34.739	34.734	4.35	94.02	2.26	32.20	0.00			2566	222222255
9	2904.6	1.872	1.864	27.791	37.011	45.819	34.741		4.50							2862	252555555
8	3204.7	1.595	1.356	27.809	37.046	45.870	34.736	34.735	4.60	105.63	2.24	32.30	0.01			3156	222222255
7	3505.1	1.306	1.044	27.822	37.077	45.918	34.726	34.727	4.71	112.81	2.26	32.50	0.01			3449	222222255
6	3807.8	0.820	0.540	27.838	37.122	45.990	34.706	34.708	4.91	124.93	2.30	33.00	0.02			3744	222222255
5	4109.2	0.501	0.277	27.844	37.144	46.026	34.694	34.690	5.06	130.57	2.32	33.10	0.01			4038	222222255
4	4512.7	0.507	0.161	27.846	37.152	46.041	34.688	34.688	5.05	133.65	2.32	33.40	0.01			4431	222222255
3	4912.8	0.521	0.130	27.845	37.153	46.044	34.685	34.685	5.08	135.02	2.33	33.50	0.02			4819	222222255
2	5315.2	0.552	0.112	27.845	37.155	46.046	34.684	34.682	5.07	135.20	2.33	33.40	0.02	0.015		5209	222222225
1	5435.4	0.566	0.112	27.845	37.155	46.046	34.684	34.680	5.06	135.21	2.31	33.40	0.01	0.023	0.024	5326	222222222

CRUISE: CD 29 STA: 46 DATE (D/M/Y): 26-11-87 TIME: 0953 LAT: 33 59.93 S LONG: 58 10.05 E

GPAVITY= 9.7965 M/S CORIOLIS= -.81551E-04 1/S SOUND SPEED= 1508.2 M/S Depth= 5093 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.076	35.548	5.25	19.076	25.422	33.894	42.000	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.076	35.548	5.25	19.076	25.422	33.894	42.001	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.298	35.535	5.68	17.294	25.855	34.385	42.546	0.047	0.0	-42.38	0.453	-845.49	5.774	19.9
30	16.882	35.540	5.69	16.877	25.959	34.503	42.676	0.068	0.1	-23.19	0.212	-454.30	4.233	29.8
40	16.734	35.540	5.68	16.727	25.994	34.543	42.721	0.088	0.2	-12.40	-0.224	-220.85	2.951	39.8
50	16.586	35.534	5.66	16.578	26.025	34.579	42.762	0.108	0.3	-52.62	-2.108	-856.78	5.813	49.7
100	15.359	35.509	5.47	15.344	26.289	34.886	43.109	0.198	1.0	-1.81	0.107	-39.26	1.244	99.4
125	15.324	35.509	5.47	15.305	26.298	34.896	43.121	0.242	1.5	-1.85	-0.123	-24.69	0.987	124.3
150	15.263	35.504	5.49	15.248	26.308	34.909	43.136	0.286	2.1	-3.22	-0.202	-40.49	1.264	149.1
200	14.998	35.477	5.51	14.967	26.348	34.958	43.195	0.373	3.6	-6.84	-0.760	-75.49	1.725	198.8
250	14.606	35.426	5.37	14.569	26.396	35.022	43.272	0.459	5.6	-7.67	-0.967	-75.86	1.730	248.4
300	14.246	35.381	5.23	14.202	26.440	35.079	43.343	0.544	8.0	-6.86	-0.748	-73.65	1.704	298.0
350	13.895	35.338	5.29	13.844	26.482	35.136	43.412	0.627	10.7	-7.84	-0.979	-74.94	1.719	347.7
400	13.573	35.299	5.30	13.516	26.520	35.186	43.475	0.708	13.8	-6.15	-0.692	-62.30	1.567	397.3
450	13.391	35.281	5.42	13.327	26.545	35.218	43.514	0.789	17.3	-4.65	-0.617	-40.89	1.270	446.9
500	13.054	35.223	5.40	12.985	26.570	35.257	43.566	0.870	21.2	-7.56	-1.374	-42.30	1.292	496.5
600	12.053	35.057	5.20	11.974	26.639	35.368	43.715	1.028	30.1	-11.44	-1.723	-77.81	1.752	595.6
700	10.965	34.907	5.06	10.877	26.725	35.501	43.892	1.179	40.2	-9.81	-1.205	-76.58	1.738	694.7
800	9.780	34.769	5.00	9.686	26.825	35.653	44.092	1.324	51.2	-14.93	-1.578	-120.53	2.180	793.7
900	8.446	34.637	4.82	8.348	26.936	35.824	44.320	1.457	62.7	-12.70	-1.160	-102.52	2.011	892.7
1000	7.085	34.521	4.73	6.986	27.043	35.995	44.551	1.588	74.6	-13.58	-0.955	-115.13	2.131	991.6
1200	4.638	34.383	4.68	4.540	27.238	36.311	44.980	1.792	98.3	-9.31	-0.222	-91.41	1.899	1189.2
1400	3.485	34.428	4.32	3.381	27.393	36.525	45.250	1.965	121.3	-3.71	0.407	-64.97	1.601	1386.6
1600	2.994	34.525	4.11	2.878	27.517	36.675	45.423	2.112	143.6	-1.93	0.508	-52.44	1.438	1583.8
1800	2.733	34.612	4.10	2.603	27.611	36.781	45.543	2.237	165.4	-1.31	0.392	-38.65	1.235	1788.8
2000	2.526	34.668	4.14	2.382	27.675	36.858	45.628	2.349	187.0	-0.86	0.196	-21.67	0.924	1977.6
2200	2.361	34.702	4.21	2.201	27.717	36.908	45.688	2.452	209.1	-1.00	0.170	-21.85	0.928	2174.2
2400	2.209	34.726	4.29	2.033	27.750	36.949	45.738	2.548	231.7	-0.85	0.082	-14.88	0.766	2370.7
2600	2.073	34.737	4.33	1.881	27.770	36.978	45.774	2.640	255.1	-0.80	0.037	-11.63	0.677	2566.9
2800	1.918	34.742	4.39	1.711	27.787	37.004	45.810	2.729	279.5	-0.94	0.012	-12.05	0.689	2763.0
3000	1.766	34.742	4.48	1.543	27.800	37.026	45.840	2.815	304.9	-0.92	-0.009	-10.73	0.651	2958.8
3200	1.554	34.736	4.55	1.316	27.812	37.051	45.877	2.897	330.9	-1.19	-0.037	-12.52	0.703	3154.5
3400	1.371	34.729	4.64	1.118	27.820	37.071	45.907	2.976	357.4	-1.22	-0.040	-12.88	0.713	3350.1
3600	1.099	34.719	4.76	0.833	27.830	37.098	45.950	3.050	383.8	-1.29	-0.053	-13.20	0.722	3545.4
3800	0.858	34.708	4.85	0.578	27.837	37.119	45.985	3.119	409.9	-1.33	-0.057	-13.76	0.737	3740.6
4000	0.644	34.697	4.94	0.349	27.842	37.138	46.016	3.183	435.5	-1.00	-0.048	-10.44	0.642	3935.5
4200	0.553	34.692	4.99	0.240	27.844	37.146	46.031	3.244	461.0	-0.32	-0.015	-3.41	0.367	4130.4
4400	0.538	34.690	5.02	0.204	27.845	37.149	46.035	3.305	487.5	-0.21	-0.010	-2.36	0.305	4325.0
4600	0.524	34.688	5.05	0.169	27.845	37.151	46.040	3.365	515.2	-0.08	-0.004	-0.82	0.179	4519.5
4800	0.519	34.686	5.07	0.141	27.846	37.153	46.043	3.426	544.3	-0.12	-0.006	-1.47	0.241	4713.8
5000	0.523	34.686	5.12	0.122	27.846	37.155	46.046	3.487	574.8	-0.10	-0.005	-1.17	0.214	4907.9
5200	0.527	34.685	5.10	0.102	27.846	37.156	46.049	3.548	606.9	-0.10	-0.004	-1.17	0.000	5101.9

BOTL NO.	PRES DBAR	CTD IPTS68	TMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTD PSS78	SAL PSS78	OXYGEN ML/L	SIL UMOL/L	PHSPT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	5.9	18.152	18.151	25.651	34.152	42.287	35.542	35.547	5.61	1.75	0.20	-0.10	0.00				5	22222255
23	103.2	15.337	15.321	26.295	34.892	43.117	35.510	35.508	5.57	2.61	0.35	2.20	0.02				102	22222255
22	202.1	15.093	15.062	26.325	34.932	43.165	35.474	35.481	5.54	2.78	0.44	3.30	-0.02				200	22222255
21	303.2	14.499	14.454	26.384	35.014	43.270	35.379	35.412	5.37	3.31	0.56	5.00	-0.01				300	22222255
20	502.2	13.300	13.229	26.518	35.197	43.497	35.221	35.275	5.39	3.99	0.73	8.30	-0.02				497	22222255
19	701.7	11.085	10.996	26.704	35.474	43.861	34.906	34.923	5.07	5.88	1.11	14.60	0.00				695	22222255
18	898.5	8.416	8.318	26.941	35.830	44.327	34.637	34.642	4.81	12.90	1.55	21.90	0.00				889	22222255
17	999.8	6.995	6.897	27.057	36.012	44.572	34.522	34.512	4.70	19.24	1.80	25.90	0.00				989	22222255
16	1200.6	4.597	4.499	27.242	36.317	44.989	34.383	34.380	4.68	35.01	2.16	31.00	0.01				1187	22222255
15	1399.6	3.520	3.416	27.390	36.520	45.243	34.428	34.419	4.35	51.97	2.36	33.70	0.01				1304	22222255
14	1600.9	3.010	2.894	27.517	36.674	45.422	34.527	34.522	4.09	65.05	2.39	34.50	0.00				1582	22222255
13	1698.7	2.873	2.750	27.561	36.725	45.479	34.566	34.560	4.04	70.14	2.39	34.40	0.00				1678	22222255
12	1999.2	2.523	2.378	27.675	36.857	45.629	34.668	34.666	4.14	81.64	2.30	33.10	0.01				1974	22222255
11	2300.8	2.285	2.117	27.735	36.930	45.715	34.716	34.712	4.23	90.22	2.26	32.50	-0.01				2270	22222255
10	2602.5	2.076	1.885	27.770	36.978	45.774	34.737	34.734	4.32	98.07	2.24	32.20	0.00				2566	22222255
9	2903.0	1.863	1.855	27.792	37.013	45.822	34.742		4.41	102.07	2.25	32.20	0.00				2861	25222255
8	3203.6	1.554	1.316	27.812	37.051	45.877	34.736	34.732	4.54	109.12	2.25	32.40	0.02				3155	22222255
7	3505.0	1.226	0.966	27.826	37.085	45.930	34.724	34.723	4.74	114.62	2.24	32.50	0.03				3449	22222255
6	3806.8	0.878	0.597	27.836	37.117	45.982	34.708	34.707	4.90	124.59	2.27	32.80	0.02				3744	22222255
5	4100.3	0.596	0.291	27.842	37.141	46.023	34.693	34.694	5.00	130.10	2.27	33.00	0.01				4037	22222255
4	4408.9	0.538	0.203	27.844	37.148	46.035	34.689	34.688	5.02	130.63	2.29	33.00	0.01				4330	22222255
3	4710.1	0.523	0.155	27.845	37.152	46.041	34.687	34.685	5.06	133.73	2.31	33.30	0.01				4622	22222255
2	5012.1	0.521	0.118	27.846	37.155	46.047	34.686	34.684	5.08	134.98	2.30	33.30	0.01				4916	22222255
1	5206.9	0.527	0.101	27.846	37.156	46.048	34.684	34.685	5.00	135.32	2.30	33.40	0.00				5104	22222255

CRUISE: CD 29 STA: 47 DATE (D/M/Y): 26-11-87 TIME: 1725 LAT: 33 59.73 S LONG: 58 53.63 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81544E-04 1/S SOUND SPEED= 1502.4 M/S Depth= 3905 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S I/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.655	35.538	5.56	18.655	25.522	34.007	42.126	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.655	35.538	5.56	18.654	25.522	34.007	42.126	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	17.086	35.513	5.80	17.082	25.889	34.426	42.594	0.045	0.0	-69.80	0.414	-1359.05	7.321	19.9
30	16.466	35.514	5.80	16.461	26.037	34.595	42.783	0.066	0.1	-41.71	-0.698	-736.93	5.391	29.8
40	16.154	35.502	5.85	16.147	26.101	34.669	42.867	0.085	0.2	-31.37	-1.419	-492.19	4.406	39.8
50	15.806	35.495	5.80	15.798	26.175	34.756	42.965	0.104	0.3	-13.10	0.577	-274.72	3.292	49.7
100	15.153	35.498	5.46	15.138	26.327	34.931	43.161	0.192	0.9	-8.01	-0.697	-100.14	1.987	99.4
125	14.937	35.472	5.48	14.918	26.355	34.967	43.205	0.235	1.4	-7.85	-1.050	-77.56	1.749	124.2
150	14.738	35.447	5.45	14.715	26.380	35.000	43.245	0.278	2.0	-11.55	-1.115	-135.49	2.312	149.1
200	14.399	35.426	5.53	14.369	26.439	35.072	43.329	0.360	3.5	-3.46	-0.275	-43.54	1.310	198.7
250	14.180	35.410	5.66	14.144	26.475	35.116	43.382	0.442	5.4	-4.03	-0.477	-40.62	1.266	248.4
300	14.100	35.400	5.65	14.056	26.485	35.130	43.398	0.523	7.6	-0.61	-0.046	-7.73	0.552	298.0
350	14.097	35.399	5.77	14.046	26.487	35.132	43.401	0.605	10.4	-0.35	-0.036	-3.85	0.389	347.6
400	14.087	35.397	5.72	14.028	26.489	35.135	43.405	0.688	13.5	-0.28	-0.014	-4.10	0.402	397.3
450	14.050	35.391	5.78	13.984	26.494	35.141	43.412	0.771	17.1	-3.77	-0.681	-23.93	0.972	446.9
500	13.479	35.286	5.55	13.407	26.532	35.203	43.495	0.854	21.1	-11.58	-1.878	-82.74	1.815	496.4
600	12.435	35.116	5.31	12.354	26.612	35.325	43.658	1.015	30.2	-12.60	-2.037	-81.96	1.798	595.6
700	11.381	34.957	5.18	11.291	26.689	35.447	43.821	1.170	40.5	-12.84	-1.568	-91.23	1.897	694.7
800	10.126	34.804	4.98	10.029	26.794	35.606	44.032	1.317	51.7	-10.06	-1.083	-82.85	1.808	793.7
900	8.865	34.678	4.89	8.764	26.903	35.771	44.249	1.455	63.7	-18.36	-1.694	-150.68	2.438	892.7
1000	6.982	34.511	4.73	6.883	27.050	36.006	44.567	1.579	75.6	-18.94	-1.318	-133.59	2.295	991.6
1200	4.756	34.375	4.72	4.657	27.219	36.286	44.950	1.789	99.1	-8.47	-0.111	-87.08	1.853	1189.2
1400	3.470	34.427	4.35	3.365	27.394	36.527	45.253	1.962	122.1	-2.99	0.469	-60.85	1.549	1366.6
1600	3.014	34.527	4.10	2.898	27.517	36.673	45.421	2.108	144.3	-2.14	0.403	-47.88	1.374	1583.8
1800	2.723	34.602	4.09	2.593	27.604	36.775	45.537	2.234	166.1	-1.10	0.357	-34.19	1.161	1780.8
2000	2.527	34.667	4.15	2.383	27.674	36.855	45.627	2.346	187.8	-1.01	0.226	-25.26	0.998	1977.6
2200	2.373	34.699	4.19	2.213	27.714	36.904	45.684	2.449	210.0	-1.06	0.147	-21.00	0.910	2174.2
2400	2.190	34.719	4.18	2.015	27.745	36.946	45.736	2.546	232.6	-0.77	0.067	-12.54	0.714	2370.7
2600	2.045	34.733	4.24	1.855	27.770	36.979	45.777	2.638	256.1	-0.66	0.053	-11.05	0.660	2566.9
2800	1.917	34.738	4.31	1.710	27.784	37.002	45.807	2.727	280.6	-0.89	-0.004	-10.49	0.643	2763.0
3000	1.792	34.738	4.38	1.569	27.795	37.020	45.833	2.814	306.2	-0.88	0.003	-10.96	0.658	2958.8
3200	1.636	34.737	4.52	1.396	27.807	37.042	45.863	2.898	332.7	-0.86	-0.025	-9.12	0.600	3154.5
3400	1.498	34.732	4.59	1.243	27.814	37.057	45.887	2.979	360.1	-1.12	-0.041	-11.64	0.678	3358.1
3600	1.279	34.726	4.70	1.008	27.824	37.081	45.924	3.057	387.9	-1.68	-0.067	-17.51	0.831	3545.4
3800	0.959	34.712	4.83	0.676	27.835	37.111	45.971	3.129	415.0	-1.29	-0.054	-13.40	0.729	3740.6
4000	0.807	34.704	4.89	0.507	27.839	37.125	45.995	3.196	441.7	-0.44	-0.019	-13.48	0.000	3935.6
4011	0.799	34.704	4.89	0.499	27.839	37.126	45.996	3.199	443.2	-0.47	-0.021	-13.48	0.000	3946.3

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	7.5	18.024	18.023	25.681	34.187	42.325	35.540	35.525	5.70	1.19	0.26	0.00	-0.01				7	222222255
23	104.4	15.125	15.109	26.329	34.934	43.166	35.493	35.491	5.54	2.41	0.43	3.00	0.02				103	222222255
22	203.7	14.392	14.362	26.439	35.072	43.330	35.425	35.432	5.68	2.91	0.50	4.60	0.01				202	222222255
21	303.5	14.090	14.054	26.486	35.131	43.399	35.400	35.398	5.72	3.32	0.56	5.50	0.01				300	222222255
20	400.7	14.092	14.034	26.488	35.133	43.403	35.397	35.395	5.68	3.52	0.57	5.50	-0.01				397	222222255
19	502.8	13.947	13.874	26.431	35.084	43.360	35.280	35.380	5.62	3.82	0.63	6.10	-0.01				498	222222255
18	601.5	12.750	12.675	26.548	35.249	43.570	35.116	35.176	5.39	4.32	0.86	10.10	-0.01				596	222222255
17	801.8	10.047	9.951	26.807	35.622	44.051	34.803	34.796	4.95	8.84	1.32	17.60	0.00				794	222222255
16	1000.9	6.745	6.649	27.079	36.047	44.618	34.508	34.494	4.75	20.30	1.89	26.50	0.00				990	222222255
15	1201.2	4.779	4.704	27.216	36.202	44.945	34.375		4.83	30.44	2.16	30.50	-0.01				1188	252222255
14	1401.8	3.477	3.372	27.393	36.525	45.251	34.427	34.424	4.39	52.05	2.40	33.80	-0.01				1386	222222255
13	1600.6	3.019	2.903	27.517	36.673	45.420	34.528	34.523	4.10	66.31	2.45	34.30	-0.01				1582	222222255
12	1801.5	2.698	2.568	27.606	36.778	45.542	34.602	34.612	4.08	74.05	2.39	33.90	-0.01				1780	222222255
11	2001.7	2.508	2.364	27.676	36.859	45.631	34.668	34.673	4.16	79.88	2.35	33.00	-0.03				1976	222222255
10	2200.9	2.335	2.176	27.717	36.910	45.691	34.700	34.702	4.19	89.73	2.34	32.90	-0.02				2172	222222255
9	2403.2	2.197	2.022	27.746	36.946	45.735	34.720	34.717	4.16	98.47	2.34	33.00	0.00				2371	222222255
8	2601.8	2.085	1.893	27.768	36.974	45.769	34.733	34.731	4.20	102.29	2.36	32.90	-0.01				2565	222222255
7	2804.0	1.959	1.750	27.781	36.996	45.800	34.738	34.737	4.25	105.20	2.37	32.90	-0.01				2764	222222255
6	3004.7	1.814	1.604	27.793	37.017	45.828	34.737		4.37	107.81	2.33	32.80	-0.01				2960	252222255
5	3205.4	1.653	1.412	27.803	37.037	45.850	34.734	34.735	4.47	109.92	2.32	32.60	-0.01				3156	222222255
4	3406.0	1.511	1.253	27.813	37.056	45.885	34.732	34.735	4.61	110.32	2.29	32.30	-0.01				3352	222222255
3	3608.4	1.295	1.023	27.823	37.079	45.921	34.725	34.729	4.70	113.04	2.29	32.40	0.00				3550	222222255
2	3807.3	0.964	0.950	27.835	37.111	45.971	34.712		4.88	120.67	2.30	32.70	-0.01				3744	252222255
1	4014.3	0.809	0.791	27.839	37.125	45.995	34.704		4.94	124.49	2.29	32.90	-0.01				3946	252222255

CRUISE: CD 29 STA: 48 DATE (D/M/Y): 27-11-87 TIME: 0218 LAT: 33 59.61 S LONG: 59 56.99 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81540E-04 1/S SOUND SPEED= 1508.1 M/S Depth= 5150 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.676	35.520	6.01	18.676	25.502	33.987	42.106	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.676	35.520	6.01	18.676	25.502	33.987	42.106	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	17.345	35.526	6.00	17.342	25.837	34.365	42.524	0.047	0.0	-47.72	-0.938	-863.46	5.836	19.9
30	16.782	35.513	5.95	16.777	25.962	34.510	42.687	0.068	0.1	-38.64	-0.870	-678.78	5.174	29.8
40	16.530	35.505	5.96	16.524	26.016	34.572	42.757	0.088	0.2	-38.59	-1.493	-630.90	4.988	39.8
50	16.101	35.485	6.09	16.093	26.100	34.671	42.871	0.107	0.3	-40.03	-2.890	-560.85	4.703	49.7
100	15.350	35.502	5.55	15.335	26.286	34.883	43.107	0.198	1.0	-5.18	0.568	-120.20	2.249	99.4
125	15.246	35.499	5.51	15.227	26.308	34.909	43.136	0.242	1.5	-6.14	-0.436	-82.84	1.808	124.3
150	15.001	35.485	5.55	15.058	26.334	34.941	43.175	0.285	2.1	-6.68	-0.730	-70.56	1.668	149.1
200	14.706	35.440	5.48	14.676	26.383	35.005	43.252	0.371	3.6	-6.41	-0.449	-85.37	1.835	198.7
250	14.405	35.423	5.58	14.367	26.437	35.070	43.327	0.455	5.5	-4.01	-0.385	-46.48	1.354	248.4
300	14.218	35.402	5.65	14.174	26.462	35.102	43.366	0.537	7.8	-6.09	-1.077	-39.40	1.247	298.0
350	13.958	35.361	5.59	13.907	26.487	35.138	43.412	0.620	10.6	-7.17	-1.271	-45.15	1.334	347.7
400	13.532	35.291	5.45	13.475	26.522	35.190	43.480	0.701	13.7	-5.76	-0.575	-62.72	1.573	397.3
450	13.278	35.259	5.44	13.215	26.551	35.229	43.529	0.782	17.2	-6.24	-0.973	-45.47	1.339	446.9
500	12.900	35.195	5.39	12.831	26.578	35.272	43.586	0.862	21.1	-9.55	-1.645	-57.88	1.511	496.4
600	11.844	35.024	5.23	11.765	26.653	35.391	43.747	1.019	29.8	-11.81	-1.699	-84.26	1.823	595.6
700	10.673	34.870	5.05	10.587	26.749	35.536	43.939	1.169	39.8	-12.06	-1.436	-95.69	1.943	694.7
800	9.549	34.744	4.96	9.456	26.844	35.681	44.131	1.310	50.6	-12.09	-1.273	-97.14	1.957	793.7
900	8.308	34.623	4.82	8.211	26.946	35.840	44.342	1.443	62.1	-15.69	-1.415	-125.77	2.227	892.6
1000	6.689	34.486	4.76	6.593	27.069	36.040	44.614	1.563	73.7	-17.70	-1.347	-137.22	2.326	991.5
1200	4.255	34.369	4.72	4.161	27.268	36.360	45.048	1.767	96.5	-7.22	0.071	-83.31	1.813	1189.2
1400	3.367	34.435	4.33	3.264	27.410	36.548	45.279	1.935	118.8	-2.92	0.414	-56.75	1.496	1786.6
1600	2.968	34.530	4.07	2.852	27.523	36.682	45.432	2.079	140.8	-2.10	0.562	-57.20	1.502	1583.8
1800	2.659	34.626	4.08	2.530	27.628	36.803	45.568	2.201	161.9	-1.02	0.311	-30.34	1.094	1780.8
2000	2.451	34.679	4.13	2.307	27.689	36.875	45.650	2.310	183.0	-1.24	0.239	-28.55	1.061	1977.6
2200	2.250	34.709	4.15	2.092	27.731	36.928	45.714	2.409	204.2	-1.04	0.115	-18.80	0.861	2174.2
2400	2.089	34.724	4.15	1.916	27.757	36.963	45.758	2.502	225.9	-0.74	0.041	-10.95	0.657	2370.6
2600	1.984	34.729	4.16	1.795	27.771	36.983	45.784	2.592	248.9	-0.61	0.016	-8.10	0.565	2566.9
2800	1.879	34.731	4.18	1.673	27.782	37.001	45.808	2.680	273.2	-0.53	0.006	-6.69	0.514	2762.9
3000	1.792	34.732	4.25	1.569	27.790	37.016	45.828	2.767	298.9	-0.65	0.003	-8.09	0.565	2958.8
3200	1.661	34.729	4.30	1.420	27.798	37.032	45.852	2.852	325.9	-0.78	-0.022	-8.36	0.574	3154.5
3400	1.564	34.728	4.41	1.306	27.806	37.046	45.873	2.936	353.9	-0.75	-0.016	-8.57	0.581	3350.0
3600	1.366	34.722	4.55	1.093	27.816	37.068	45.906	3.017	382.8	-1.27	-0.028	-14.88	0.766	3545.4
3800	1.156	34.717	4.73	0.868	27.827	37.092	45.942	3.093	411.6	-1.32	-0.043	-14.77	0.763	3740.5
4000	0.932	34.708	4.85	0.629	27.834	37.113	45.977	3.165	440.1	-1.19	-0.049	-13.01	0.716	3935.5
4200	0.728	34.698	4.93	0.409	27.840	37.132	46.007	3.232	468.1	-0.93	-0.040	-10.20	0.634	4130.3
4400	0.627	34.692	4.98	0.291	27.842	37.141	46.023	3.295	496.0	-0.38	-0.020	-4.16	0.405	4325.0
4600	0.574	34.689	5.02	0.217	27.843	37.146	46.032	3.358	524.7	-0.26	-0.011	-3.05	0.347	4519.4
4800	0.559	34.687	5.06	0.180	27.844	37.149	46.037	3.420	554.4	-0.21	-0.010	-2.48	0.311	4713.7
5000	0.546	34.686	5.08	0.146	27.844	37.152	46.042	3.482	585.5	-0.12	-0.004	-1.46	0.240	4907.9
5200	0.553	34.685	5.04	0.127	27.845	37.154	46.045	3.544	618.0	-0.10	-0.006	-1.46	0.000	5101.9
5207	0.552	34.684	5.05	0.126	27.845	37.153	46.044	3.547	619.2	-0.10	-0.006	-1.46	0.000	5108.6

BOTL NO.	PRES DBAR	CTD TMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTD SAL PSS78	SALTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	3.9	18.112	18.111	25.644	34.147	42.283	35.520	35.511	5.70	2.07	0.31	1.10	0.10	2.419	1.241	3	222222222
23	102.4	15.216	15.201	26.315	34.917	43.146	35.502	35.496	5.54	2.58	0.40	2.80	0.09	2.405	1.251	101	222222222
22	201.9	14.619	14.589	26.402	35.027	43.277	35.440	35.434	5.49	2.92	0.50	4.80	0.03	2.430	1.228	200	222222222
21	302.3	14.232	14.188	26.458	35.098	43.362	35.401	35.407	5.56	3.44	0.55	5.40	0.02	2.575	1.367	299	222222222
20	402.2	13.676	13.618	26.492	35.154	43.440	35.290	35.313	5.35	3.78	0.69	7.70	0.01	2.235	1.184	398	222222222
19	503.4	13.016	12.946	26.552	35.241	43.552	35.190	35.213	5.33	4.30	0.79	9.40	0.01	2.217	1.171	498	222222222
18	601.7	11.988	11.908	26.624	35.357	43.707	35.022	35.044	5.17	5.15	0.98	12.40	0.02	1.942	1.004	596	222222222
17	701.4	10.776	10.732	26.729	35.513	43.912	34.868		5.05	6.52	1.18	15.70	0.01	1.397	0.746	694	252222222
16	801.3	9.357	9.265	26.873	35.719	44.176	34.741	34.722	4.89	9.77	1.44	19.50	0.00	1.325	0.557	793	222222222
15	1000.4	6.114	6.022	27.143	36.141	44.741	34.485	34.446	4.84	22.23	1.97	27.70	0.00	0.948	0.493	990	222222222
14	1201.7	4.190	4.096	27.274	36.370	45.061	34.369	34.370	4.73	37.25	2.29	31.80	0.01	0.689	0.405	1189	222222222
13	1400.4	3.292	3.291	27.417	36.559	45.293	34.435		4.28	56.19	2.42	34.30	0.03	0.264	0.119	1385	252222222
12	1601.6	2.865	2.750	27.532	36.696	45.451	34.530	34.549	4.03	69.16	2.44	34.70	0.01	0.021	0.024	1583	222222222
11	1801.6	2.642	2.513	27.630	36.805	45.571	34.626	34.629	4.05	77.53	2.38	33.90	0.00			1780	222222255
10	2101.3	2.355	2.204	27.711	36.902	45.682	34.695	34.694	4.13	90.16	2.36	33.40	0.00			2074	222222255
9	2402.8	2.134	1.959	27.754	36.958	45.750	34.724	34.719	4.14	101.25	2.37	33.40	0.00			2370	222222255
8	2704.1	1.955	1.756	27.774	36.989	45.792	34.730	34.729	4.15	109.11	2.39	33.60	0.00			2666	222222255
7	3006.8	1.785	1.561	27.791	37.016	45.830	34.732	34.734	4.21	113.21	2.37	33.60	0.01			2962	222222255
6	3405.7	1.556	1.298	27.807	37.048	45.875	34.729	34.727	4.41	116.61	2.34	33.40	0.00			3352	222222255
5	3808.2	1.123	0.835	27.828	37.095	45.947	34.716	34.716	4.90	119.18	2.29	32.90	0.01			3745	222222255
4	4210.9	0.717	0.398	27.839	37.132	46.008	34.697	34.703	4.94	125.50	2.28	32.90	-0.02			4137	222222255
3	4612.1	0.579	0.221	27.842	37.145	46.031	34.688	34.688	5.02	133.01	2.33	33.60	0.00			4527	222222255
2	5014.2	0.552	0.148	27.844	37.151	46.041	34.685	34.686	5.06	134.72	2.33	33.50	0.00	0.011		4918	222222225
1	5210.0	0.552	0.126	27.844	37.153	46.044	34.684	34.681	5.06	135.74	2.33	33.60	0.03	0.011	0.015	5107	222222222

CRUISE: CD 29 STA: 49 DATE (D/M/Y): 27-11-87 TIME: 0940 LAT: 33 59.67 S LONG: 60 34.15 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81542E-04 1/S SOUND SPEED= 1509.2 M/S Depth= 5346 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.962	35.550	5.54	18.962	25.453	33.928	42.038	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
3	18.962	35.550	5.54	18.961	25.453	33.928	42.038	0.000	0.0	-0.36	0.000	0.00	0.000	3.0
20	17.557	35.532	5.58	17.554	25.790	34.311	42.464	0.049	0.1	-154.60	-3.275	-2813.34	10.534	19.9
30	16.758	35.517	5.84	16.754	25.970	34.518	42.696	0.070	0.1	-52.00	-0.751	-936.37	6.077	29.8
40	16.111	35.500	5.84	16.105	26.109	34.679	42.878	0.090	0.2	-56.02	-2.361	-890.06	5.925	39.8
50	15.646	35.502	5.77	15.638	26.217	34.804	43.018	0.108	0.3	-37.44	1.547	-774.59	5.527	49.7
100	15.151	35.496	5.51	15.135	26.325	34.929	43.160	0.196	0.9	-6.91	-0.594	-86.78	1.850	99.4
125	14.989	35.476	5.45	14.971	26.346	34.957	43.193	0.239	1.4	-6.82	-0.804	-67.78	1.635	124.2
150	14.726	35.443	5.39	14.703	26.379	35.000	43.246	0.281	2.0	-7.20	-0.833	-75.14	1.722	149.1
200	14.449	35.430	5.58	14.420	26.431	35.062	43.317	0.365	3.5	-4.33	-0.137	-67.29	1.629	198.7
250	14.263	35.409	5.55	14.227	26.456	35.094	43.357	0.447	5.4	-7.43	-0.968	-69.46	1.655	248.4
300	14.039	35.384	5.64	13.995	26.486	35.133	43.404	0.528	7.7	-3.76	-0.801	-15.51	0.782	298.0
350	13.696	35.314	5.57	13.645	26.505	35.166	43.450	0.610	10.4	-2.15	0.058	-40.20	1.259	347.6
400	13.356	35.266	5.46	13.300	26.539	35.213	43.510	0.690	13.5	-6.67	-1.027	-49.57	1.398	397.3
450	12.968	35.202	5.38	12.905	26.569	35.260	43.572	0.778	16.9	-11.31	-1.832	-75.26	1.723	446.9
500	12.415	35.115	5.35	12.347	26.612	35.325	43.658	0.849	20.7	-8.52	-1.293	-59.23	1.528	496.4
600	11.260	34.942	5.18	11.184	26.698	35.468	43.839	1.002	29.3	-11.63	-1.495	-88.56	1.869	595.6
700	9.925	34.785	5.02	9.843	26.811	35.631	44.064	1.146	38.9	-12.59	-1.347	-102.49	2.010	694.6
800	8.725	34.663	4.87	8.637	26.912	35.787	44.270	1.281	49.1	-13.04	-1.209	-105.36	2.038	793.6
900	7.299	34.538	4.74	7.209	27.026	35.967	44.513	1.405	59.9	-14.46	-1.127	-116.42	2.143	892.6
1000	6.041	34.450	4.72	5.950	27.124	36.126	44.730	1.517	70.8	-11.34	-0.751	-89.35	1.877	991.5
1200	4.352	34.376	4.67	4.257	27.263	36.350	45.034	1.716	93.0	-6.61	0.066	-76.05	1.732	1189.1
1400	3.347	34.456	4.20	3.244	27.428	36.567	45.299	1.882	115.0	-3.40	0.505	-67.00	1.626	1386.5
1600	2.936	34.548	4.05	2.821	27.541	36.701	45.452	2.021	136.3	-1.52	0.430	-42.80	1.299	1583.7
1800	2.663	34.626	4.08	2.534	27.620	36.802	45.567	2.142	157.1	-1.11	0.287	-29.81	1.084	1780.7
2000	2.462	34.678	4.13	2.318	27.688	36.873	45.648	2.250	178.1	-0.95	0.206	-23.24	0.957	1977.5
2200	2.288	34.710	4.20	2.130	27.729	36.923	45.707	2.350	199.5	-0.93	0.109	-17.17	0.823	2174.1
2400	2.150	34.723	4.19	1.976	27.752	36.955	45.747	2.444	221.6	-0.78	0.055	-12.33	0.697	2370.6
2600	2.028	34.731	4.20	1.837	27.769	36.979	45.778	2.535	244.8	-0.68	0.021	-9.21	0.603	2566.8
2800	1.894	34.733	4.21	1.687	27.782	37.001	45.807	2.624	269.2	-0.76	-0.001	-9.05	0.597	2762.9
3000	1.792	34.733	4.25	1.568	27.791	37.017	45.829	2.710	294.8	-0.61	0.002	-7.63	0.548	2958.7
3200	1.689	34.734	4.37	1.448	27.800	37.032	45.851	2.796	321.8	-0.67	-0.004	-8.09	0.565	3154.4
3400	1.555	34.732	4.49	1.297	27.810	37.050	45.877	2.879	349.8	-0.88	-0.012	-10.43	0.641	3350.0
3600	1.355	34.727	4.65	1.082	27.821	37.073	45.912	2.959	378.4	-1.28	-0.046	-13.88	0.740	3545.3
3800	1.139	34.719	4.76	0.851	27.829	37.095	45.946	3.035	407.0	-1.39	-0.055	-15.06	0.771	3740.5
4000	0.880	34.707	4.85	0.579	27.836	37.118	45.984	3.105	435.0	-1.27	-0.057	-13.50	0.730	3935.5
4200	0.667	34.696	4.94	0.350	27.841	37.137	46.015	3.171	462.5	-0.95	-0.041	-10.47	0.642	4130.3
4400	0.550	34.690	5.00	0.216	27.844	37.148	46.034	3.233	489.6	-0.44	-0.020	-4.94	0.441	4324.9
4600	0.510	34.687	5.03	0.155	27.845	37.152	46.042	3.294	517.4	-0.28	-0.013	-3.16	0.353	4519.4
4800	0.493	34.685	5.07	0.116	27.846	37.155	46.047	3.354	546.3	-0.17	-0.008	-2.03	0.283	4713.7
5000	0.495	34.684	5.07	0.095	27.846	37.157	46.049	3.414	576.5	-0.07	-0.004	-0.90	0.188	4907.8
5200	0.508	34.683	5.10	0.084	27.846	37.157	46.050	3.475	608.2	-0.04	-0.003	-0.50	0.140	5101.8
5400	0.523	34.683	5.10	0.074	27.846	37.158	46.052	3.537	641.6	-0.05	-0.004	-0.50	0.000	5295.6
5447	0.528	34.683	5.12	0.073	27.846	37.158	46.052	3.552	649.7	-0.05	-0.005	-0.50	0.000	5341.1

BOTL NO.	PRES DBAR	CTDMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	3.8	18.064	18.064	25.478	33.956	42.069	35.550	35.559	5.60	1.51	0.26	0.10	0.00	2.207	1.220	3	222222222
23	103.1	15.288	15.273	26.293	34.892	43.118	35.493	35.502	5.55	2.11	0.42	2.60	0.24	2.432	1.322	102	222222222
22	200.7	14.506	14.477	26.419	35.048	43.302	35.431	35.428	5.49	3.01	0.52	5.00	0.00	2.720	1.290	199	222222222
21	300.0	14.082	14.018	26.481	35.127	43.397	35.384	35.389	5.61	3.42	0.59	5.90	-0.01	2.546	1.345	297	222222222
19	600.5	11.701	11.623	26.616	35.361	43.723	34.942	35.002	5.10	4.92	1.04	12.90	0.01	1.801	0.986	595	222222222
18	801.5	8.804	8.715	26.900	35.771	44.251	34.663	34.689	4.84	11.15	1.54	21.20	0.01	0.957	0.519	793	222222222
17	990.9	8.057	8.035	27.123	36.125	44.727	34.451		4.72	23.51	1.98	27.80	0.01	0.638	0.334	988	252222222
16	1199.1	4.121	4.027	27.287	36.386	45.081	34.376	34.386	4.62	40.19	2.29	32.20	0.01	0.766	0.254	1186	222222222
15	1397.6	3.328	3.226	27.428	36.568	45.301	34.454	34.457	4.18	57.98	2.44	34.20	0.00	0.160	0.093	1382	222222222
14	1699.3	2.784	2.682	27.592	36.760	45.518	34.595	34.591	4.02	74.15	2.43	34.20	0.01			1679	222222255
13	2000.3	2.451	2.308	27.689	36.874	45.649	34.678	34.679	4.13	85.20	2.36	33.30	0.00			1975	222222255
12	2300.1	2.231	2.064	27.741	36.940	45.727	34.719	34.717	4.19	94.65	2.35	32.70	0.01			2270	222222255
11	2603.0	2.040	1.849	27.768	36.978	45.776	34.731	34.733	4.19	103.09	2.35	32.80	-0.01			2567	222222255
10	2904.2	1.857	1.641	27.785	37.007	45.816	34.733	34.735	4.21	110.83	2.36	33.10	-0.01			2862	222222255
9	3205.6	1.687	1.445	27.801	37.033	45.852	34.734	34.733	4.36	113.54	2.33	33.00	0.00			3157	222222255
8	3504.3	1.439	1.173	27.818	37.065	45.899	34.731	34.730	4.63	115.35	2.28	32.30	0.01			3448	222222255
7	3804.0	1.095	0.808	27.832	37.101	45.954	34.719	34.717	4.79	121.38	2.28	32.40	0.00			3741	222222255
6	4212.5	0.649	0.331	27.842	37.138	46.018	34.695	34.701	5.00	131.93	2.32	33.00	0.01			4139	222222255
5	4510.4	0.526	0.180	27.845	37.150	46.038	34.688	34.687	5.06	134.24	2.32	33.30	-0.01			4428	222222255
2	5214.7	0.500	0.083	27.847	37.158	46.051	34.684	34.687	5.08	137.35	2.35	33.30	-0.01	0.014		5112	222222255
1	5452.9	0.528	0.073	27.846	37.158	46.052	34.683	34.686	5.06	138.36	2.35	33.30	0.02	0.025	0.020	5343	222222222

CRUISE: CD 29 STA: 50 DATE (D/M/Y): 27-11-87 TIME: 2102 LAT: 33 59.37 S LONG: 61 59.67 E

GRAVITY= 9.7965 M/S CORIOLIS= - 81532E-04 1/S SOUND SPEED= 1507.4 M/S Depth= 5125 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.107	35.545	4.71	19.107	25.412	33.882	41.988	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.107	35.545	4.71	19.107	25.412	33.882	41.988	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.594	35.551	5.64	17.591	25.796	34.315	42.467	0.049	0.0	-112.56	-5.832	-1824.98	8.484	19.9
30	16.673	35.501	5.90	16.668	25.979	34.530	42.710	0.070	0.1	-40.58	-1.572	-669.21	5.138	29.8
40	16.507	35.497	5.82	16.501	26.014	34.571	42.757	0.090	0.2	-8.46	-0.062	-154.81	2.471	39.8
50	16.238	35.493	5.83	16.230	26.075	34.641	42.836	0.110	0.3	-71.56	-1.639	-1223.57	6.947	49.7
100	14.806	35.440	5.44	14.791	26.358	34.975	43.218	0.198	0.9	-10.67	-0.921	-131.45	2.277	99.4
125	14.636	35.430	5.46	14.617	26.388	35.012	43.261	0.240	1.4	-7.11	-0.560	-87.34	1.856	124.2
150	14.439	35.415	5.47	14.417	26.420	35.051	43.307	0.281	2.0	-5.32	-0.350	-73.98	1.708	149.1
200	14.218	35.396	5.62	14.188	26.454	35.094	43.358	0.363	3.5	-2.21	-0.035	-36.13	1.194	198.7
250	14.187	35.397	5.65	14.150	26.463	35.104	43.369	0.445	5.3	-1.58	-0.305	-8.51	0.579	248.4
300	13.988	35.341	5.59	13.865	26.480	35.133	43.409	0.526	7.6	-9.86	-1.772	-59.86	1.537	298.0
350	13.491	35.279	5.43	13.442	26.520	35.189	43.481	0.608	10.3	-6.35	-0.677	-65.76	1.611	347.6
400	13.294	35.257	5.46	13.237	26.545	35.222	43.521	0.688	13.4	-4.69	-0.561	-44.25	1.321	397.3
450	12.884	35.192	5.42	12.821	26.579	35.273	43.588	0.767	16.8	-10.03	-1.701	-61.29	1.555	446.8
500	12.394	35.111	5.34	12.327	26.613	35.327	43.661	0.845	20.6	-8.13	-1.301	-52.19	1.435	496.4
600	11.245	34.942	5.15	11.169	26.700	35.463	43.842	0.998	29.1	-12.80	-1.669	-95.75	1.943	595.6
700	10.060	34.798	4.93	9.977	26.799	35.613	44.041	1.142	38.7	-11.87	-1.295	-94.87	1.926	694.6
800	8.678	34.658	4.83	8.590	26.915	35.792	44.278	1.276	49.0	-15.18	-1.405	-122.43	2.198	793.6
900	7.202	34.528	4.74	7.112	27.031	35.977	44.527	1.399	59.6	-15.48	-1.250	-118.98	2.166	892.6
1000	5.598	34.410	4.79	5.511	27.147	36.171	44.795	1.510	70.3	-12.23	-0.784	-94.65	1.932	991.5
1200	4.001	34.368	4.69	3.909	27.293	36.399	45.099	1.703	91.9	-6.11	0.221	-79.03	1.766	1189.1
1400	3.261	34.457	4.25	3.158	27.437	36.581	45.316	1.864	113.3	-2.72	0.491	-58.92	1.525	1386.5
1600	2.828	34.562	4.06	2.714	27.561	36.727	45.483	2.001	134.2	-1.53	0.439	-43.61	1.312	1583.7
1800	2.613	34.636	4.08	2.484	27.641	36.817	45.584	2.119	154.7	-1.18	0.381	-36.41	1.198	1780.7
2000	2.402	34.695	4.18	2.260	27.707	36.894	45.672	2.224	175.0	-1.16	0.203	-25.27	0.998	1977.5
2200	2.213	34.719	4.19	2.056	27.742	36.940	45.728	2.320	195.5	-1.03	0.066	-15.45	0.781	2174.1
2400	2.064	34.727	4.15	1.891	27.762	36.969	45.765	2.411	216.9	-0.68	0.024	-9.24	0.604	2370.5
2600	1.952	34.730	4.15	1.763	27.774	36.988	45.791	2.500	239.5	-0.63	0.007	-7.72	0.552	2566.8
2800	1.839	34.730	4.16	1.633	27.784	37.006	45.815	2.587	263.5	-0.59	-0.003	-6.77	0.517	2762.8
3000	1.718	34.729	4.19	1.496	27.793	37.022	45.839	2.673	288.8	-0.67	-0.010	-7.62	0.548	2958.7
3200	1.624	34.726	4.23	1.385	27.799	37.034	45.857	2.757	315.4	-0.54	-0.011	-6.00	0.487	3154.4
3400	1.501	34.722	4.32	1.245	27.806	37.049	45.879	2.840	343.3	-0.91	-0.026	-10.04	0.629	3349.9
3600	1.318	34.717	4.45	1.046	27.815	37.070	45.911	2.920	371.9	-1.08	-0.031	-12.00	0.688	3545.3
3800	1.090	34.709	4.61	0.803	27.825	37.094	45.948	2.996	400.5	-1.18	-0.037	-13.28	0.724	3740.4
4000	0.908	34.703	4.73	0.605	27.832	37.112	45.977	3.067	428.9	-0.96	-0.031	-11.10	0.662	3935.4
4200	0.763	34.698	4.84	0.444	27.837	37.127	46.000	3.135	457.2	-0.76	-0.025	-8.86	0.591	4130.2
4400	0.655	34.693	4.93	0.318	27.841	37.138	46.019	3.200	485.7	-0.51	-0.017	-6.20	0.495	4324.9
4600	0.586	34.690	4.99	0.229	27.844	37.146	46.031	3.263	514.7	-0.50	-0.020	-6.03	0.488	4519.4
4800	0.533	34.687	5.05	0.155	27.845	37.152	46.041	3.325	544.2	-0.38	-0.018	-4.44	0.418	4713.7
5000	0.496	34.684	5.08	0.096	27.846	37.156	46.049	3.385	574.6	-0.09	-0.005	-1.06	0.204	4907.8
5195	0.517	34.684	5.08	0.094	27.846	37.157	46.049	3.445	605.6	-0.02	-0.002	-1.06	0.000	5096.9

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.2	19.015	19.015	25.435	33.909	42.018	35.545	35.550	5.51	1.62	0.24	0.20	0.01	2.148	1.245	3	222222222
23	101.9	14.709	14.694	26.378	34.999	43.245	35.438	35.434	5.59	2.76	0.47	4.20	0.10	2.363	1.243	101	222222222
22	201.4	14.222	14.193	26.454	35.094	43.358	35.397	35.400	5.68	3.14	0.57	5.40	0.03	2.651	1.383	199	222222222
21	300.5	13.910	13.867	26.478	35.131	43.407	35.339	35.344	5.57	3.54	0.59	6.50	0.02	2.419	1.375	297	222222222
20	400.8	13.220	13.164	26.560	35.240	43.541	35.257	35.252	5.38	4.30	0.74	8.80	0.01	2.152	1.222	397	222222222
19	600.3	11.406	11.328	26.671	35.427	43.801	34.942	34.962	5.14	5.82	1.05	13.90	0.00	1.662	0.940	594	222222222
18	799.5	8.806	8.718	26.896	35.767	44.248	34.659	34.671	4.83	12.02	1.50	21.00	0.00	1.036	0.554	791	222222222
17	1000.5	5.623	5.535	27.144	36.167	44.790	34.410	34.412	4.84	24.59	1.98	28.30	0.01	0.849	0.495	990	222222222
16	1100.4	4.718	4.628	27.218	36.287	44.952	34.370	34.372	4.89	31.18	2.12	30.70	0.02	1.155	0.439	1089	222222222
15	1199.0	4.038	3.945	27.289	36.393	45.091	34.368	34.368	4.74	38.88	2.24	32.10	0.01	1.026	0.542	1186	222222222
14	1399.0	3.284	3.182	27.434	36.576	45.311	34.456	34.454	4.26	56.55	2.39	34.40	0.00	0.317	0.177	1303	222222222
13	1598.8	2.842	2.720	27.560	36.725	45.480	34.562	34.560	4.05	67.28	2.40	34.70	0.00	0.068	0.044	1580	222222222
12	1799.7	2.635	2.506	27.638	36.814	45.580	34.636	34.631	4.08	74.26	2.34	33.90	0.00	0.033	0.029	1778	222222222
11	2099.4	2.309	2.159	27.727	36.920	45.703	34.711	34.709	4.23	87.45	2.28	32.90	0.01	0.013		2072	222222225
10	2400.1	2.076	1.903	27.761	36.967	45.763	34.727	34.726	4.15	101.20	2.33	33.10	-0.02			2368	222222255
9	2701.4	1.914	1.717	27.777	36.995	45.800	34.730	34.729	4.14	110.26	2.37	33.00	0.01	0.012	0.005	2663	222222222
8	3003.1	1.735	1.513	27.792	37.020	45.836	34.729	34.737	4.19	116.75	2.38	34.10	0.01	0.011		2959	222222225
7	3303.7	1.600	1.351	27.800	37.038	45.862	34.725	34.726	4.26	119.77	2.37	34.00	-0.01	0.019	0.000	3252	222222222
6	3605.4	1.341	1.068	27.813	37.067	45.907	34.717	34.725	4.43	122.83	2.35	34.00	0.00	0.013	0.000	3547	222222222
5	3906.0	1.001	0.706	27.828	37.103	45.962	34.706	34.709	4.70	127.40	2.31	33.70	-0.01			3840	222222255
4	4204.9	0.781	0.461	27.836	37.125	45.997	34.697	34.700	4.89	130.66	2.29	33.40	-0.01	0.017		4131	222222225
3	4511.1	0.632	0.283	27.842	37.141	46.024	34.692	34.692	5.01	131.85	2.30	33.50	0.01	0.014	0.000	4429	222222222
2	4811.2	0.537	0.488	27.844	37.151	46.040	34.686		5.05	134.16	2.28	33.50	0.03	0.015	0.018	4721	252222222
1	5200.5	0.518	0.093	27.846	37.157	46.050	34.684	34.686	5.10	136.10	2.30	33.60	0.07	0.014		5098	222222225

CRUISE: CD 29 STA: 51 DATE (D/M/Y): 28-11-87 TIME: 1024 LAT: 33 59.53 S LONG: 63 59.93 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81537E-04 1/S SOUND SPEED= 1505.2 M/S Depth= 4649 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.751	35.098	4.64	19.751	24.903	33.359	41.452	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.751	35.098	4.64	19.751	24.903	33.360	41.452	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	18.917	35.612	5.34	18.913	25.512	33.988	42.099	0.055	0.1	-102.48	6.722	-2500.34	9.931	19.9
30	18.387	35.654	5.49	18.381	25.679	34.172	42.298	0.078	0.1	-16.69	1.649	-435.66	4.145	29.8
40	18.050	35.647	5.49	18.043	25.758	34.262	42.398	0.101	0.2	-69.77	-4.275	-1120.09	6.647	39.8
50	17.364	35.609	5.56	17.355	25.898	34.424	42.582	0.123	0.3	-47.90	-2.269	-789.86	5.582	49.7
100	15.557	35.498	5.42	15.542	26.236	34.826	43.044	0.220	1.0	-17.79	-0.496	-293.94	3.405	99.4
125	15.302	35.495	5.40	15.283	26.292	34.891	43.117	0.265	1.5	-7.60	-0.375	-113.10	2.112	124.3
150	15.050	35.476	5.35	15.028	26.334	34.942	43.177	0.308	2.2	-10.19	-0.903	-127.54	2.243	149.1
200	14.679	35.438	5.40	14.649	26.387	35.010	43.258	0.394	3.7	-6.31	-0.661	-70.43	1.667	198.8
250	14.319	35.391	5.26	14.282	26.430	35.067	43.328	0.478	5.6	-9.75	-1.291	-90.24	1.887	248.4
300	13.797	35.326	5.19	13.753	26.491	35.148	43.428	0.560	7.9	-7.60	-0.878	-75.79	1.729	298.1
350	13.539	35.292	5.29	13.490	26.520	35.188	43.477	0.641	10.6	-4.05	-0.503	-37.76	1.220	347.7
400	13.280	35.261	5.33	13.224	26.550	35.228	43.528	0.721	13.6	-9.57	-1.465	-70.45	1.667	397.3
450	12.855	35.188	5.30	12.793	26.581	35.276	43.592	0.800	17.1	-4.75	-0.821	-27.94	1.050	448.9
500	12.298	35.093	5.19	12.231	26.617	35.336	43.674	0.878	20.9	-16.67	-2.686	-104.59	2.031	496.5
600	10.947	34.905	5.05	10.872	26.725	35.500	43.892	1.028	29.3	-11.07	-1.369	-84.95	1.830	595.6
700	9.664	34.759	4.97	9.582	26.835	35.666	44.110	1.169	38.6	-13.20	-1.376	-107.17	2.056	694.7
800	8.427	34.636	4.81	8.341	26.937	35.825	44.321	1.301	48.7	-14.20	-1.290	-112.10	2.183	793.7
900	7.096	34.522	4.70	7.007	27.041	35.992	44.547	1.421	59.1	-11.29	-0.891	-86.49	1.847	892.6
1000	5.822	34.430	4.71	5.732	27.136	36.149	44.763	1.532	69.9	-12.23	-0.772	-96.36	1.950	991.5
1200	4.002	34.373	4.65	3.969	27.291	36.393	45.090	1.726	91.6	-6.18	0.178	-77.52	1.749	1189.1
1400	3.295	34.452	4.24	3.193	27.430	36.571	45.305	1.889	113.2	-2.71	0.468	-57.48	1.506	1386.5
1600	2.899	34.553	4.03	2.784	27.548	36.710	45.463	2.028	134.3	-1.66	0.469	-46.87	1.360	1583.7
1800	2.654	34.627	4.04	2.525	27.630	36.805	45.570	2.148	155.1	-1.20	0.324	-33.02	1.141	1788.7
2000	2.423	34.684	4.09	2.280	27.696	36.883	45.659	2.255	175.8	-1.08	0.176	-22.74	0.947	1977.5
2200	2.261	34.707	4.10	2.103	27.729	36.925	45.711	2.353	196.9	-0.73	0.088	-13.58	0.732	2174.1
2400	2.146	34.721	4.10	1.972	27.750	36.953	45.745	2.448	219.0	-0.64	0.051	-10.50	0.644	2370.6
2600	2.037	34.728	4.12	1.847	27.766	36.976	45.774	2.539	242.4	-0.61	0.025	-8.65	0.584	2566.8
2800	1.935	34.731	4.13	1.728	27.778	36.994	45.799	2.629	267.1	-0.69	0.008	-8.75	0.587	2762.9
3000	1.813	34.731	4.16	1.589	27.788	37.012	45.824	2.717	293.1	-0.61	-0.005	-7.26	0.535	2958.7
3200	1.715	34.730	4.21	1.473	27.795	37.026	45.844	2.804	320.5	-0.62	-0.011	-7.08	0.528	3154.4
3400	1.606	34.727	4.26	1.347	27.802	37.040	45.864	2.889	349.1	-0.73	-0.020	-8.14	0.567	3350.0
3600	1.458	34.722	4.35	1.182	27.809	37.057	45.890	2.972	378.7	-1.07	-0.030	-12.12	0.691	3545.3
3800	1.247	34.715	4.52	0.956	27.819	37.080	45.925	3.051	408.6	-1.21	-0.037	-13.81	0.738	3740.5
4000	1.011	34.707	4.67	0.705	27.829	37.103	45.962	3.125	438.2	-1.31	-0.044	-14.95	0.768	3935.5
4200	0.797	34.699	4.81	0.477	27.836	37.124	45.996	3.195	467.2	-0.85	-0.030	-9.85	0.623	4130.3
4400	0.695	34.694	4.89	0.356	27.840	37.135	46.013	3.260	496.1	-0.49	-0.019	-5.75	0.476	4324.9
4600	0.648	34.692	4.94	0.289	27.841	37.140	46.022	3.325	525.6	-0.21	-0.009	-2.53	0.316	4519.4
4755	0.628	34.690	4.98	0.251	27.842	37.143	46.027	3.375	549.3	-0.24	-0.009	-2.53	0.000	4670.0

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	76.6	16.465	16.453	26.054	34.612	42.800	35.534	35.563	5.65	2.50	0.19	0.10	0.00	2.221	1.221	75	222222222
23	152.7	14.974	14.951	26.348	34.960	43.197	35.473	35.475	5.39	2.70	0.43	4.00	0.00	2.265	1.274	151	222222222
22	251.1	14.144	14.107	26.467	35.110	43.377	35.391	35.374	5.18	3.50	0.59	6.90	0.00	2.439	1.285	249	222222222
21	351.4	13.440	13.391	26.540	35.211	43.505	35.292	35.281	5.32	3.90	0.66	8.30	0.00	2.232	1.235	348	222222222
20	450.9	12.722	12.660	26.607	35.308	43.628	35.188	35.167	5.28	4.10	0.78	10.10	0.00	1.940	1.088	446	222222222
19	600.7	10.834	10.759	26.744	35.524	43.920	34.903	34.889	5.02	6.20	1.13	15.40	0.00	1.422	0.817	595	222222222
18	799.5	8.305	8.220	26.957	35.851	44.352	34.639	34.623	4.81	12.70	1.57	22.40	0.00	0.683	0.411	791	222222222
17	999.5	5.601	5.513	27.164	36.187	44.811	34.431	34.416	4.77	25.90	2.02	28.90	0.00	0.728	0.420	989	222222222
16	1158.6	4.281	4.190	27.264	36.355	45.042	34.369	34.369	4.75	36.20	2.23	31.60	0.00	0.912	0.373	1146	222222222
15	1250.5	3.810	3.715	27.331	36.446	45.155	34.391	34.391	4.47	44.60	2.31	33.10	0.00	0.413	0.211	1237	222222222
14	1400.1	3.250	3.148	27.434	36.578	45.314	34.452	34.461	4.15	58.00	2.44	34.50	0.00	0.163	0.113	1384	222222222
13	1599.2	2.901	2.786	27.548	36.709	45.462	34.553	34.565	3.98	70.50	2.46	34.70	0.00	0.046	0.039	1580	222222222
12	1800.5	2.652	2.523	27.630	36.804	45.569	34.627	34.627	4.01	77.70	2.39	33.90	0.00	0.012	0.019	1779	222222222
11	2099.4	2.340	2.190	27.714	36.905	45.686	34.697	34.696	4.12	90.80	2.36	33.30	0.00			2072	222222255
10	2400.3	2.136	1.962	27.751	36.955	45.747	34.721	34.721	4.12	101.30	2.37	33.40	0.00			2368	222222255
9	2701.7	1.978	1.779	27.773	36.986	45.788	34.730	34.730	4.13	108.10	2.38	33.60	0.00	0.000		2663	222222225
8	3002.0	1.796	1.572	27.789	37.014	45.827	34.731	34.734	4.15	113.50	2.40	33.70	0.00	0.008		2957	222222225
7	3300.0	1.644	1.394	27.800	37.036	45.857	34.729	34.741	4.23	118.80	2.40	33.90	0.00			3249	222222255
6	3606.0	1.432	1.157	27.811	37.060	45.895	34.722	34.722	4.37	121.70	2.37	33.60	0.00			3548	222222255
5	3907.6	1.186	0.808	27.826	37.094	45.948	34.711	34.710	4.65	124.20	2.34	33.40	0.00	0.005		3842	222222225
4	4208.4	0.785	0.464	27.836	37.125	45.997	34.698	34.699	4.85	129.00	2.33	33.40	0.00			4135	222222255
3	4510.4	0.662	0.312	27.840	37.138	46.019	34.692	34.693	4.92	131.60	2.29	33.40	0.00	0.005	0.000	4428	222222222
2	4760.0	0.628	0.251	27.842	37.144	46.028	34.690	34.693	4.97	131.00	2.20	33.30	0.00			4671	222222255

CRUISE: CD 29 STA: 52 DATE (D/M/Y): 28-11-87 TIME: 2340 LAT: 33 59.81 S LONG: 66 0.21 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81547E-04 1/S SOUND SPEED= 1504.5 M/S Depth= 4582 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.021	35.659	5.53	19.021	25.521	33.993	42.100	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.021	35.659	5.53	19.021	25.521	33.993	42.100	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.994	35.662	5.52	18.990	25.531	34.004	42.112	0.049	0.1	-20.95	0.171	-438.71	4.160	19.9
30	18.500	35.666	5.49	18.494	25.660	34.149	42.271	0.073	0.1	-71.52	-4.483	-1163.60	6.774	29.8
40	17.841	35.637	5.62	17.834	25.802	34.312	42.455	0.096	0.2	-30.60	-0.410	-578.38	4.776	39.8
50	17.639	35.622	5.63	17.630	25.841	34.358	42.507	0.118	0.3	-19.16	-1.495	-283.41	3.343	49.7
100	15.532	35.490	5.59	15.517	26.236	34.827	43.045	0.217	1.0	-21.20	-1.026	-324.57	3.578	99.4
125	15.313	35.486	5.50	15.293	26.282	34.881	43.107	0.261	1.6	-8.51	-0.321	-126.54	2.234	124.3
150	15.058	35.473	5.45	15.035	26.330	34.938	43.172	0.305	2.2	-5.65	-0.223	-88.15	1.865	149.1
200	14.754	35.442	5.42	14.724	26.374	34.994	43.239	0.391	3.7	-9.17	-1.174	-89.52	1.879	198.8
250	14.274	35.385	5.35	14.238	26.435	35.074	43.336	0.475	5.6	-7.44	-0.666	-88.35	1.867	248.4
300	13.918	35.341	5.38	13.874	26.478	35.130	43.406	0.557	7.9	-8.77	-1.389	-65.37	1.686	298.1
350	13.555	35.288	5.35	13.505	26.514	35.181	43.470	0.639	10.6	-7.21	-0.781	-74.36	1.713	347.7
400	13.284	35.261	5.39	13.228	26.550	35.227	43.527	0.719	13.7	-5.22	-0.770	-40.33	1.261	397.3
450	12.919	35.199	5.37	12.857	26.576	35.269	43.583	0.798	17.1	-6.97	-1.179	-43.19	1.305	446.9
500	12.536	35.135	5.32	12.468	26.604	35.312	43.641	0.876	20.9	-10.14	-1.632	-65.33	1.605	496.5
600	11.511	34.980	5.12	11.434	26.681	35.433	43.801	1.030	29.5	-9.39	-1.271	-69.24	1.652	595.6
700	10.464	34.846	5.02	10.379	26.766	35.563	43.974	1.177	39.3	-12.88	-1.523	-98.40	1.970	694.7
800	9.155	34.702	4.92	9.065	26.874	35.730	44.195	1.316	49.9	-13.61	-1.347	-108.99	2.073	793.7
900	7.824	34.579	4.75	7.731	26.983	35.900	44.423	1.444	61.0	-17.36	-1.463	-137.06	2.325	892.6
1000	6.103	34.447	4.68	6.012	27.114	36.113	44.714	1.559	72.1	-14.74	-0.977	-116.79	2.146	991.5
1200	4.123	34.387	4.50	4.030	27.296	36.395	45.089	1.755	94.0	-6.88	0.192	-86.15	1.843	1189.2
1400	3.255	34.456	4.19	3.152	27.437	36.581	45.317	1.916	115.4	-2.56	0.460	-55.38	1.478	1386.6
1600	2.875	34.549	4.00	2.760	27.547	36.710	45.465	2.054	136.4	-1.58	0.419	-42.72	1.298	1583.8
1800	2.633	34.630	4.03	2.504	27.634	36.810	45.576	2.173	157.1	-1.03	0.317	-30.90	1.104	1780.8
2000	2.430	34.686	4.13	2.206	27.697	36.884	45.660	2.280	177.8	-1.22	0.224	-27.30	1.038	1977.6
2200	2.236	34.713	4.14	2.078	27.736	36.933	45.720	2.378	198.7	-0.84	0.075	-14.06	0.745	2174.2
2400	2.096	34.723	4.12	1.923	27.756	36.962	45.757	2.470	220.4	-0.71	0.036	-10.36	0.639	2370.6
2600	1.988	34.728	4.13	1.799	27.770	36.982	45.783	2.560	243.4	-0.61	0.014	-7.98	0.561	2566.8
2800	1.880	34.730	4.13	1.674	27.781	37.000	45.807	2.649	267.7	-0.65	0.001	-7.76	0.553	2762.9
3000	1.767	34.729	4.16	1.544	27.790	37.017	45.831	2.736	293.4	-0.63	-0.004	-7.47	0.543	2958.8
3200	1.672	34.728	4.21	1.432	27.797	37.030	45.850	2.921	320.4	-0.66	-0.014	-7.45	0.542	3154.5
3400	1.559	34.725	4.29	1.302	27.804	37.044	45.871	2.905	348.7	-0.75	-0.019	-8.41	0.576	3350.0
3600	1.393	34.719	4.39	1.119	27.812	37.063	45.899	2.987	377.9	-1.04	-0.029	-11.67	0.678	3545.3
3800	1.153	34.712	4.56	0.865	27.822	37.088	45.938	3.065	407.2	-1.14	-0.037	-12.93	0.714	3740.5
4000	0.960	34.705	4.68	0.656	27.830	37.107	45.969	3.138	436.3	-1.03	-0.034	-11.82	0.683	3935.5
4200	0.815	34.699	4.80	0.494	27.835	37.122	45.993	3.207	465.3	-0.69	-0.022	-8.19	0.568	4130.3
4400	0.751	34.696	4.86	0.410	27.838	37.130	46.005	3.274	494.6	-0.36	-0.013	-4.30	0.412	4325.0
4587	0.727	34.695	4.86	0.366	27.840	37.134	46.012	3.336	523.0	-0.13	-0.005	-4.30	0.000	4506.8

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
5	4.2	18.997	18.996	25.528	34.001	42.109	35.660	35.664	5.45	2.28	0.23	0.10	0.00	2.103	1.188	4	22222222
4	78.0	15.671	15.659	26.236	34.821	43.034	35.532	35.498	5.77	2.88	0.29	0.50	0.00	2.343	1.308	77	22222222
3	153.8	14.919	14.896	26.361	34.974	43.213	35.473	35.460	5.51	2.70	0.47	4.10	0.00	2.422	1.398	152	22222222
2	253.2	14.156	14.119	26.456	35.099	43.366	35.380	35.371	5.41	3.58	0.59	6.30	0.00	2.221	1.284	251	22222222
1	351.0	13.467	13.417	26.530	35.200	43.493	35.286	35.269	5.37	3.91	0.75	8.10	0.00	2.071	1.167	348	22222222
24	452.5	12.834	12.772	26.593	35.289	43.605	35.198	35.182	5.35	4.31	0.83	9.60	0.00			448	22222255
23	600.9	11.431	11.353	26.695	35.450	43.822	34.979	34.968	5.11	4.91	1.08	13.70	0.00	1.655	0.954	595	22222222
22	799.5	9.813	9.924	26.900	35.761	44.232	34.705	34.686	4.86	10.01	1.47	20.30	0.00	1.027	0.504	791	22222222
21	1000.2	5.938	5.847	27.134	36.141	44.749	34.445	34.437	4.72	23.69	2.01	28.50	0.00	9.625	0.337	990	22222222
20	1199.6	4.121	4.028	27.296	36.395	45.089	34.387	34.384	4.53	40.50	2.34	32.60	0.00	0.313	0.193	1186	22222222
19	1399.2	3.256	3.154	27.437	36.580	45.316	34.456	34.452	4.21	57.90	2.49	34.70	0.00	0.184	0.112	1383	22222222
18	1599.7	2.855	2.740	27.548	36.713	45.468	34.549	34.554	4.02	69.06	2.50	34.80	0.00	0.051	0.052	1591	22222222
17	1798.6	2.624	2.496	27.634	36.811	45.577	34.630	34.634	4.04	77.68	2.43	34.00	0.00	0.032		1777	22222225
16	2000.3	2.431	2.288	27.698	36.884	45.660	34.687	34.687	4.14	82.97	2.36	33.40	0.00			1975	22222255
14	2391.9	2.105	2.106	27.755	36.961	45.754	34.723		4.13	101.19	2.38	33.40	0.00	0.008		2360	25222225
13	2600.5	1.989	1.799	27.769	36.982	45.783	34.728	34.728	4.12	108.24	2.43	33.80	0.00	0.010	0.000	2564	22222222
12	2800.9	1.883	1.676	27.780	37.000	45.807	34.730	34.728	4.12	113.93	2.43	33.90	0.00	0.014	0.000	2761	22222222
11	3073.3	1.740	1.510	27.792	37.021	45.837	34.729	34.727	4.18	117.67	2.46	34.20	0.00			3027	22222255
10	3404.2	1.579	1.321	27.802	37.042	45.868	34.725	34.724	4.26	120.43	2.45	34.00	0.00			3351	22222255
8	4007.0	0.969	0.664	27.829	37.106	45.968	34.704	34.706	4.70	127.49	2.39	33.70	0.00	0.000		3939	22222225
7	4310.1	0.776	0.445	27.838	37.127	46.001	34.698	34.696	4.85	130.44	2.37	33.60	0.00			4234	22222255
6	4592.8	0.727	0.366	27.839	37.133	46.011	34.694	34.696	4.90	130.86	2.34	33.60	0.00			4509	22222255

CRUISE: CD 29 STA: 53 DATE (D/M/Y): 29-11-87 TIME: 1200 LAT: 3- 0.1 S LONG: 67 59.86 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81559E-04 1/S SOUND SPEED= 1504.7 M/S Depth= 4547 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.582	35.632	5.71	19.582	25.394	33.848	41.938	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.582	35.682	5.71	19.582	25.394	33.848	41.938	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.256	35.695	5.33	19.252	25.488	33.953	42.053	0.051	0.1	-81.27	2.909	-1849.92	8.5.1	19.9
30	18.283	35.670	5.55	18.278	25.717	34.213	42.342	0.075	0.1	-62.54	-3.650	-1029.32	6.371	29.8
40	17.955	35.659	5.59	17.948	25.791	34.297	42.436	0.097	0.2	-20.77	-1.094	-344.11	3.684	39.8
50	17.857	35.664	5.55	17.849	25.819	34.328	42.471	0.119	0.3	-12.04	0.678	-278.94	3.316	49.8
100	15.959	35.521	5.69	15.943	26.162	34.738	42.942	0.221	1.1	-30.12	-2.462	-404.68	3.995	99.8
125	15.324	35.466	5.45	15.304	26.264	34.863	43.089	0.236	1.6	-18.80	-1.859	-225.40	2.981	124.3
150	14.820	35.418	5.30	14.797	26.340	34.957	43.200	0.310	2.2	-18.14	-0.798	-272.81	3.280	149.1
200	14.194	35.385	5.18	14.165	26.451	35.091	43.357	0.393	3.7	-10.47	-1.348	-97.65	1.962	198.8
250	13.758	35.326	5.18	13.722	26.498	35.156	43.438	0.474	5.5	-8.01	-1.033	-72.45	1.690	248.4
300	13.431	35.280	5.35	13.389	26.532	35.203	43.496	0.554	7.8	-6.01	-0.753	-54.64	1.468	298.1
350	13.122	35.235	5.37	13.073	26.567	35.245	43.550	0.632	10.4	-6.29	-1.037	-40.81	1.268	347.7
400	12.793	35.181	5.40	12.740	26.566	35.283	43.601	0.710	13.4	-6.75	-1.063	-45.57	1.341	397.3
450	12.443	35.124	5.41	12.382	26.612	35.324	43.655	0.788	16.7	-6.91	-1.060	-47.01	1.362	446.9
500	12.104	35.070	5.41	12.037	26.637	35.364	43.709	0.865	20.4	-7.29	-1.096	-49.44	1.396	496.5
600	11.315	34.956	5.23	11.238	26.698	35.458	43.835	1.016	28.9	-9.44	-1.270	-68.54	1.644	595.6
700	10.380	34.836	5.19	10.295	26.773	35.574	43.988	1.161	38.6	-10.71	-1.303	-79.50	1.771	694.7
800	9.137	34.697	4.94	9.047	26.873	35.729	44.196	1.300	49.2	-12.88	-1.258	-104.06	2.026	793.7
900	7.816	34.576	4.79	7.722	26.982	35.899	44.422	1.428	60.3	-14.48	-1.218	-115.53	2.134	892.6
1000	6.370	34.465	4.67	6.276	27.095	36.081	44.669	1.545	71.6	-13.21	-0.894	-106.43	2.049	991.5
1200	4.339	34.372	4.65	4.244	27.261	36.349	45.033	1.747	94.2	-6.98	-0.016	-75.54	1.726	1189.2
1400	3.426	34.438	4.26	3.322	27.406	36.541	45.269	1.917	116.6	-3.05	0.456	-60.72	1.547	1386.6
1600	2.937	34.536	4.02	2.821	27.531	36.691	45.443	2.060	138.5	-1.96	0.470	-50.13	1.405	1583.8
1800	2.668	34.620	4.03	2.539	27.623	36.797	45.561	2.182	159.7	-1.16	0.351	-34.42	1.165	1780.8
2000	2.474	34.679	4.14	2.330	27.687	36.872	45.646	2.291	187.7	-1.20	0.240	-28.09	1.052	1977.6
2200	2.265	34.711	4.17	2.107	27.732	36.928	45.713	2.390	201.9	-0.87	0.099	-15.87	0.791	2174.2
2400	2.108	34.725	4.15	1.935	27.757	36.962	45.756	2.483	223.8	-0.83	0.031	-11.42	0.671	2370.6
2600	1.993	34.730	4.13	1.803	27.770	36.983	45.783	2.573	246.8	-0.66	0.024	-9.17	0.601	2566.8
2800	1.869	34.730	4.15	1.663	27.782	37.002	45.810	2.662	271.0	-0.63	-0.004	-7.23	0.534	2762.9
3000	1.771	34.730	4.17	1.548	27.790	37.017	45.831	2.748	296.6	-0.63	-0.016	-6.54	0.508	2958.8
3200	1.684	34.726	4.21	1.443	27.795	37.027	45.847	2.834	323.7	-0.54	-0.010	-6.12	0.491	3154.5
3400	1.572	34.724	4.28	1.314	27.802	37.042	45.868	2.918	352.2	-0.75	-0.017	-8.58	0.582	3350.0
3600	1.419	34.720	4.39	1.144	27.810	37.060	45.895	3.001	381.6	-1.00	-0.029	-11.25	0.666	3545.3
3800	1.221	34.713	4.52	0.931	27.819	37.081	45.928	3.080	411.3	-1.18	-0.033	-13.56	0.731	3740.5
4000	1.002	34.706	4.68	0.697	27.828	37.103	45.963	3.154	440.9	-1.17	-0.037	-13.51	0.730	3935.5
4200	0.839	34.699	4.80	0.517	27.834	37.120	45.989	3.224	470.0	-0.73	-0.025	-8.49	0.579	4130.3
4400	0.753	34.696	4.87	0.413	27.837	37.129	46.004	3.291	499.5	-0.34	-0.011	-4.05	0.399	4325.0
4600	0.733	34.694	4.89	0.371	27.839	37.133	46.010	3.357	530.0	-0.16	-0.003	-4.05	0.000	4519.4
4619	0.734	34.694	4.90	0.369	27.839	37.133	46.010	3.364	533.0	-0.12	-0.002	-4.05	0.000	4537.9

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	5.0	19.352	19.351	25.469	33.931	42.028	35.703	35.665	5.43	1.93	0.20	0.00	0.00	2.299	1.214	4	222222222
23	77.7	17.001	16.989	25.967	34.506	42.676	35.585	35.602	5.72	2.32	0.24	0.20	0.00	2.269	1.282	77	222222222
22	154.6	15.039	15.016	26.286	34.896	43.132	35.411	35.434	5.45	2.90	0.44	3.30	0.00	2.496	1.342	153	222222222
21	254.0	13.781	13.745	26.490	35.148	43.428	35.322	35.327	5.29	4.10	0.64	7.10	0.00	2.320	1.270	251	222222222
20	352.3	13.187	13.138	26.547	35.228	43.531	35.234	35.249	5.41	4.09	0.72	8.30	0.00	2.213	1.204	349	222222222
19	453.3	12.586	12.525	26.581	35.288	43.614	35.120	35.143	5.34	4.48	0.82	9.90	0.00	2.111	1.113	449	222222222
18	601.4	11.435	11.358	26.675	35.430	43.802	34.954	34.971	5.26	5.87	1.02	13.10	0.00	1.767	0.965	595	222222222
17	802.4	9.252	9.161	26.851	35.702	44.164	34.691	34.710	4.94	9.45	1.41	19.40	0.00	1.080	0.688	794	222222222
16	1001.4	6.357	6.263	27.096	36.082	44.671	34.464	34.466	4.70	22.42	1.91	27.40	0.00	0.617	0.265	991	222222222
14	1399.2	3.423	3.319	27.406	36.541	45.269	34.437	34.438	4.23	55.71	2.43	34.30	0.00	0.158	0.128	1383	222222222
13	1599.4	2.954	2.839	27.529	36.688	45.439	34.536	34.533	4.02	68.08	2.45	34.90	0.00	0.055	0.041	1581	222222222
12	1799.7	2.665	2.536	27.623	36.797	45.562	34.620	34.620	4.03	76.66	2.40	33.80	0.00			1778	222222255
11	2000.5	2.465	2.321	27.688	36.873	45.648	34.679	34.683	4.14	82.24	2.32	32.70	0.00			1975	222222255
10	2201.0	2.260	2.102	27.732	36.928	45.714	34.711	34.713	4.20	91.22	2.33	32.80	0.00			2172	222222255
9	2400.5	2.118	1.944	27.756	36.960	45.754	34.725	34.729	4.18	98.61	2.33	32.80	0.00			2368	222222255
8	2602.1	1.997	1.807	27.770	36.982	45.782	34.729	34.738	4.14	112.98	2.39	33.50	0.00	0.019		2566	222222255
7	2801.6	1.881	1.674	27.781	37.001	45.808	34.731	34.732	4.14	118.77	2.39	33.60	0.00			2761	222222255
6	3103.0	1.721	1.489	27.793	37.023	45.840	34.728	34.728	4.19	118.57	2.40	34.30	0.00			3056	222222255
5	3404.3	1.558	1.300	27.803	37.044	45.871	34.724	34.726	4.26	120.97	2.39	34.00	0.00			3351	222222255
4	3706.9	1.301	1.019	27.816	37.073	45.915	34.716	34.716	4.45	124.37	2.37	33.90	0.00			3646	222222255
3	4007.9	0.979	0.674	27.829	37.106	45.967	34.705	34.710	4.72	125.57	2.32	33.60	0.00			3939	222222255
2	4308.9	0.782	0.451	27.836	37.126	45.999	34.697	34.697	4.85	130.17	2.33	33.50	0.00			4233	222222255
1	4623.8	0.735	0.370	27.839	37.133	46.010	34.694	34.691	4.90	129.97	2.33	33.50	0.00			4539	222222255

CRUISE: CD 29 STA: 54 DATE (D/M/Y): 30-11-87 TIME: 0120 LAT: 33 59 95 S LONG 78 0 33 E

GRAVITY= 9.7965 M/S CORIOLIS= -.81552E-04 1/5 SOUND SPEED= 1503.4 M/S Depth= 4302 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-v	B-v	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.981	35.704	5.42	18.981	25.565	34.038	42.146	0.000	0.0	-0.10	0.000	0.00	0.000	0.0
1	18.981	35.704	5.42	18.981	25.565	34.038	42.146	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.648	35.691	5.48	18.644	25.642	34.125	42.243	0.048	0.0	-123.17	-3.836	-2241.09	9.401	19.9
30	17.805	35.670	5.44	17.800	25.836	34.347	42.490	0.070	0.1	-14.27	0.005	-281.13	3.330	29.8
40	17.707	35.670	5.61	17.700	25.860	34.374	42.521	0.092	0.2	-6.36	-0.105	-118.40	2.161	39.8
50	17.634	35.668	5.57	17.626	25.877	34.394	42.543	0.113	0.3	-7.22	-0.022	-140.06	2.350	49.7
100	16.427	35.576	5.60	16.411	26.096	34.655	42.843	0.216	1.1	-24.27	-2.134	-324.61	3.578	99.4
125	15.857	35.522	5.49	15.838	26.187	34.766	42.974	0.263	1.6	-22.94	-2.325	-272.40	3.277	124.3
150	15.234	35.461	5.40	15.211	26.282	34.884	43.113	0.309	2.2	-23.88	-2.416	-282.29	3.336	149.1
200	14.419	35.392	5.19	14.390	26.408	35.040	43.298	0.395	3.8	-14.86	-1.320	-177.32	2.644	198.0
250	13.794	35.330	5.17	13.758	26.493	35.150	43.430	0.476	5.6	-8.34	-1.022	-79.16	1.767	248.4
300	13.475	35.288	5.33	13.432	26.529	35.190	43.490	0.556	7.9	-4.55	-0.569	-41.59	1.281	298.1
350	13.212	35.249	5.37	13.163	26.553	35.234	43.536	0.635	10.5	-6.68	-1.084	-44.88	1.330	347.7
400	12.866	35.192	5.35	12.811	26.580	35.275	43.590	0.714	13.5	-8.69	-1.492	-51.61	1.427	397.3
450	12.446	35.122	5.34	12.385	26.610	35.322	43.654	0.791	16.9	-9.43	-1.448	-64.00	1.589	446.9
500	12.081	35.067	5.32	12.015	26.639	35.366	43.712	0.868	20.6	-9.87	-1.449	-68.54	1.644	496.5
600	11.073	34.922	5.28	10.997	26.716	35.486	43.872	1.018	29.0	-9.45	-1.230	-70.03	1.662	595.6
700	10.062	34.798	5.12	9.979	26.798	35.613	44.040	1.162	38.5	-11.79	-1.343	-90.37	1.888	694.7
800	8.837	34.668	4.86	8.748	26.899	35.768	44.247	1.297	48.9	-12.42	-1.151	-101.35	1.999	793.7
900	7.537	34.552	4.71	7.446	27.004	35.933	44.469	1.422	59.7	-12.08	-1.055	-102.14	2.007	892.6
1000	6.086	34.444	4.69	5.994	27.114	36.114	44.716	1.537	70.8	-15.74	-1.048	-123.40	2.206	991.5
1200	4.062	34.381	4.52	3.969	27.297	36.399	45.096	1.732	92.6	-6.18	0.144	-75.59	1.727	1189.1
1400	3.306	34.462	4.13	3.203	27.437	36.578	45.312	1.894	114.1	-2.71	0.451	-56.46	1.492	1386.6
1600	2.858	34.554	4.02	2.744	27.552	36.716	45.471	2.032	135.1	-1.74	0.455	-46.84	1.359	1583.7
1800	2.622	34.633	4.04	2.494	27.637	36.813	45.580	2.151	155.7	-1.10	0.349	-33.64	1.152	1780.7
2000	2.429	34.690	4.16	2.286	27.700	36.887	45.663	2.256	176.2	-1.21	0.217	-26.70	1.026	1977.5
2200	2.227	34.716	4.17	2.069	27.739	36.937	45.724	2.353	196.9	-0.90	0.064	-13.90	0.740	2174.1
2400	2.068	34.725	4.12	1.895	27.759	36.967	45.763	2.445	218.4	-0.74	0.026	-10.01	0.628	2370.6
2600	1.957	34.728	4.12	1.768	27.772	36.986	45.788	2.534	241.2	-0.62	0.008	-7.75	0.553	2566.8
2800	1.855	34.728	4.12	1.649	27.781	37.002	45.810	2.622	265.4	-0.59	-0.004	-6.74	0.515	2762.9
3000	1.756	34.727	4.15	1.533	27.789	37.016	45.831	2.709	291.0	-0.55	-0.003	-6.54	0.508	2958.7
3200	1.671	34.726	4.19	1.431	27.796	37.029	45.849	2.794	318.0	-0.55	-0.012	-6.18	0.493	3154.4
3400	1.575	34.723	4.26	1.317	27.801	37.041	45.867	2.879	346.4	-0.61	-0.015	-6.84	0.519	3350.0
3600	1.421	34.719	4.36	1.147	27.810	37.059	45.894	2.961	376.0	-0.97	-0.026	-11.06	0.661	3545.3
3800	1.243	34.713	4.50	0.952	27.818	37.079	45.924	3.041	405.9	-1.03	-0.030	-11.86	0.684	3740.5
4000	1.059	34.707	4.63	0.752	27.826	37.098	45.954	3.116	435.9	-1.08	-0.035	-12.46	0.701	3935.5
4200	0.883	34.701	4.76	0.560	27.833	37.116	45.983	3.187	465.6	-0.60	-0.020	-7.06	0.528	4130.3
4397	0.846	34.699	4.79	0.503	27.835	37.121	45.981	3.255	495.5	-0.21	-0.004	-7.06	0.000	4322.0

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILICAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	4.6	18.899	18.898	25.587	34.062	42.172	35.704	35.702	5.46	1.24	0.19	0.00	0.00	2.137	1.217	4	22222222
23	78.1	16.821	16.809	26.037	34.582	42.756	35.620	35.622	5.66	1.24	0.21	0.10	0.00	2.217	1.328	77	22222222
22	153.3	15.148	15.125	26.297	34.902	43.134	35.456	35.449	5.41	2.04	0.44	3.20	0.00	2.289	1.260	152	22222222
21	252.1	13.737	13.701	26.504	35.163	43.445	35.328	35.321	5.29	3.43	0.64	7.30	0.00	2.360	1.321	250	22222222
20	354.3	13.103	13.054	26.573	35.257	43.563	35.245	35.228	5.51	3.63	0.73	8.60	0.00	2.034	1.158	351	22222222
19	452.6	12.349	12.288	26.625	35.341	43.676	35.117	35.105	5.33	4.03	0.85	10.60	0.00	2.016	1.108	448	22222222
18	599.8	11.104	11.028	26.711	35.480	43.865	34.923	34.925	5.28	4.83	1.06	13.70	0.00	1.661	0.902	594	22222222
17	799.9	8.995	8.905	26.875	35.738	44.210	34.670	34.684	4.92	9.60	1.44	20.20	0.00	0.897	0.505	792	22222222
16	1001.3	5.924	5.834	27.134	36.141	44.750	34.443	34.432	4.75	24.29	2.02	28.20	0.00	0.739	0.380	991	22222222
14	1399.5	3.300	3.197	27.437	36.579	45.312	34.462	34.460	4.12	59.41	2.46	34.60	0.00	0.101	0.105	1384	22222222
13	1500.4	2.898	2.785	27.542	36.704	45.457	34.546	34.539	4.02	69.14	2.45	34.70	0.00	0.056	0.038	1562	22222222
12	1801.5	2.629	2.501	27.637	36.813	45.579	34.634	34.630	4.05	74.70	2.39	34.00	0.00			1780	22222255
11	2000.0	2.439	2.296	27.699	36.885	45.661	34.690	34.686	4.19	80.07	2.33	33.30	0.00			1975	22222255
10	2202.6	2.233	2.075	27.738	36.936	45.722	34.716	34.713	4.16	91.58	2.33	32.90	0.00	0.014	0.015	2174	22222222
9	2402.8	2.079	1.906	27.759	36.966	45.761	34.725	34.727	4.15	107.08	2.38	33.40	0.00			2370	22222255
8	2604.3	1.957	1.767	27.771	36.986	45.788	34.727	34.736	4.10	108.68	2.40	33.70	0.00			2568	22222255
7	2804.2	1.850	1.644	27.781	37.002	45.811	34.728	34.727	4.10	114.44	2.41	33.90	0.00			2764	22222255
6	3105.9	1.712	1.480	27.793	37.023	45.841	34.727	34.723	4.16	118.81	2.42	33.90	0.00			3059	22222255
5	3405.3	1.565	1.306	27.802	37.042	45.869	34.723	34.721	4.32	121.22	2.41	33.90	0.00			3352	22222255
4	3707.7	1.335	1.052	27.814	37.068	45.909	34.716	34.712	4.43	124.40	2.40	33.80	0.00			3647	22222255
3	4010.0	1.040	0.733	27.827	37.100	45.958	34.707	34.704	4.64	126.99	2.38	33.60	0.00			3942	22222255
2	4206.7	0.872	0.549	27.834	37.117	45.985	34.701	34.698	4.78	128.39	2.38	33.60	0.00			4133	22222255
1	4399.3	0.846	0.502	27.835	37.121	45.992	34.699	34.692	4.80	128.40	2.35	33.40	0.00	0.004		4320	22222225

CRUISE: CD 29 STA: 55 DATE (D/M/Y): 30-11-87 TIME: 1435 LAT: 34 0.10 S LONG: 71 59 84 E

GRAVITY= 9.7965 M/S CORIOLIS= -0.81557E-04 1/S SOUND SPEED= 1586.2 M/S Depth= 4987 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.908	35.397	5.45	17.908	25.600	34.111	42.255	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
3	17.908	35.397	5.45	17.908	25.600	34.111	42.255	0.007	0.0	-0.34	0.000	0.00	0.000	3.0
20	17.857	35.423	5.53	17.854	25.633	34.146	42.291	0.047	0.0	-28.04	0.715	-594.54	4.842	19.9
30	17.589	35.436	5.62	17.584	25.709	34.230	42.383	0.071	0.1	-84.11	1.155	-1700.19	8.188	29.8
40	17.041	35.458	5.66	17.035	25.858	34.397	42.567	0.093	0.2	-34.90	0.963	-724.17	5.344	39.8
50	16.574	35.471	5.76	16.566	25.979	34.534	42.719	0.113	0.3	-48.56	2.999	-1094.61	6.570	49.7
100	14.663	35.34	5.42	14.649	26.333	34.957	43.206	0.205	1.0	-35.27	-3.457	-400.15	3.972	99.4
125	13.807	35.209	5.25	13.789	26.455	35.112	43.391	0.246	1.4	-19.06	-1.159	-260.60	3.206	124.3
150	13.439	35.265	5.23	13.418	26.514	35.184	43.477	0.286	2.0	-10.43	-0.697	-136.29	2.318	149.1
200	13.055	35.222	5.26	13.027	26.560	35.246	43.553	0.363	3.4	-7.51	-1.155	-51.91	1.431	198.7
250	12.765	35.174	5.36	12.731	26.582	35.280	43.598	0.439	5.1	-6.55	-1.014	-43.59	1.111	248.4
300	12.453	35.126	5.44	12.412	26.608	35.319	43.649	0.514	7.2	-4.75	-0.722	-31.59	1.116	297.0
350	12.151	35.078	5.46	12.104	26.630	35.354	43.697	0.589	9.7	-6.77	-1.082	-40.80	1.268	347.6
400	11.866	35.032	5.40	11.814	26.650	35.386	43.740	0.663	12.6	-6.22	-0.957	-38.61	1.234	397.2
450	11.516	34.979	5.42	11.459	26.675	35.426	43.794	0.737	15.8	-7.73	-1.110	-51.48	1.425	446.8
500	11.099	34.918	5.35	11.037	26.706	35.475	43.859	0.811	19.3	-9.10	-1.290	-59.30	1.529	496.4
600	10.247	34.809	5.16	10.175	26.773	35.579	43.999	0.953	27.3	-8.90	-0.992	-69.26	1.653	595.5
700	9.251	34.703	4.93	9.172	26.858	35.709	44.170	1.090	36.4	-12.45	-1.215	-98.17	1.967	694.6
800	7.800	34.571	4.70	7.717	26.979	35.896	44.420	1.217	46.1	-15.98	-1.315	-126.69	2.235	793.6
900	6.346	34.459	4.60	6.263	27.091	36.078	44.667	1.332	56.1	-15.00	-1.039	-115.29	2.132	892.5
1000	5.117	34.385	4.68	5.033	27.184	36.232	44.878	1.436	66.1	-10.65	-0.450	-90.24	1.886	991.4
1200	3.697	34.389	4.42	3.607	27.340	36.461	45.175	1.618	86.4	-4.17	0.332	-64.22	1.591	1189.0
1400	3.174	34.479	4.08	3.073	27.462	36.610	45.349	1.772	106.9	-2.44	0.474	-54.71	1.469	1386.4
1600	2.803	34.571	3.99	2.689	27.571	36.737	45.495	1.904	127.1	-1.32	0.428	-40.61	1.265	1583.6
1800	2.571	34.649	4.07	2.443	27.654	36.833	45.602	2.020	147.1	-1.11	0.358	-34.24	1.162	1780.6
2000	2.369	34.702	4.16	2.227	27.715	36.904	45.683	2.123	167.1	-1.24	0.205	-26.25	1.017	1977.4
2200	2.150	34.726	4.18	1.993	27.752	36.954	45.745	2.217	187.1	-0.94	0.043	-13.92	0.717	2174.0
2400	2.015	34.729	4.14	1.843	27.767	36.977	45.776	2.306	208.0	-0.73	0.008	-8.73	0.587	2370.4
2600	1.903	34.729	4.13	1.715	27.777	36.994	45.800	2.393	230.3	-0.66	-0.001	-7.62	0.548	2566.7
2800	1.783	34.729	4.11	1.579	27.787	37.012	45.824	2.479	253.9	-0.62	-0.004	-7.10	0.529	2762.7
3000	1.684	34.728	4.16	1.463	27.795	37.026	45.844	2.564	278.9	-0.56	-0.011	-6.13	0.492	2958.6
3200	1.599	34.725	4.21	1.361	27.800	37.037	45.861	2.647	305.3	-0.65	-0.017	-6.95	0.523	3154.3
3400	1.464	34.721	4.29	1.209	27.807	37.052	45.884	2.729	332.9	-0.82	-0.027	-8.75	0.587	3345.8
3600	1.327	34.716	4.39	1.055	27.813	37.068	45.908	2.809	361.4	-0.70	-0.020	-7.95	0.560	3540.2
3800	1.185	34.711	4.50	0.896	27.820	37.084	45.933	2.886	390.6	-0.77	-0.022	-8.95	0.594	3740.3
4000	1.102	34.708	4.59	0.794	27.824	37.094	45.948	2.961	420.5	-0.39	-0.011	-4.60	0.426	3935.3
4200	1.074	34.706	4.61	0.746	27.826	37.098	45.955	3.036	451.8	-0.28	-0.011	-3.13	0.351	4130.1
4400	1.037	34.705	4.68	0.688	27.828	37.104	45.964	3.111	484.4	-0.14	-0.005	-1.74	0.262	4324.8
4600	1.045	34.704	4.69	0.673	27.829	37.105	45.966	3.186	518.8	-0.05	0.000	-0.72	0.168	4519.3
4800	1.065	34.704	4.71	0.669	27.829	37.106	45.967	3.262	555.3	-0.01	0.000	-0.24	0.098	4713.6
5000	1.087	34.704	4.71	0.666	27.829	37.106	45.967	3.339	594.0	-0.01	0.000	-0.24	0.098	4907.7
5063	1.094	34.704	4.72	0.666	27.829	37.106	45.967	3.364	606.7	-0.01	-0.001	-0.24	0.098	4968.9

BUTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALTY	OXYGEN	SILCAT	PSPHPT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	1.5	17.816	17.816	25.092	33.614	41.769	34.704	35.416	5.60	2.10	0.22	0.00	0.00	2.375	1.313	1	222222222
23	72.6	15.834	15.823	26.123	34.704	42.913	35.434	35.437	5.94	2.30	0.25	0.10	0.00	2.394	1.340	72	222222222
22	153.2	13.412	13.390	26.518	35.189	43.483	35.263	35.262	5.35	3.75	0.64	7.70	0.00	2.453	1.266	151	222222222
20	350.7	12.149	12.102	26.631	35.354	43.697	35.078	35.077	5.45	3.55	0.85	10.60	0.00	2.205	1.198	347	222222222
19	451.4	11.559	11.501	26.665	35.415	43.781	34.977	34.982	5.45	5.19	0.95	12.20	0.00	2.136	1.168	447	222222222
18	551.4	10.721	10.653	26.725	35.510	43.910	34.854	34.863	5.34	4.38	1.13	14.40	0.00	1.866	1.053	546	222222222
17	700.0	8.998	8.920	26.900	35.761	44.232	34.704	34.678	4.92	10.33	1.47	20.20	0.00	1.061	0.647	693	222222222
16	901.2	6.183	6.101	27.111	36.106	44.702	34.457	34.444	4.77	22.64	1.96	27.70	0.00	0.738	0.380	892	222222222
14	1300.7	3.331	3.237	27.411	36.551	45.283	34.434	34.438	4.28	56.06	2.44	34.30	0.00	0.192	0.132	1286	222222222
13	1500.8	2.894	2.787	27.525	36.687	45.441	34.525	34.529	4.07	87.95	2.46	34.70	0.00	0.092	0.068	1483	222222222
12	1800.6	2.560	2.432	27.656	36.835	45.604	34.650	34.650	4.12	77.81	2.37	33.50	0.00			1779	222222255
11	1999.9	2.350	2.208	27.716	36.907	45.687	34.702	34.703	4.25	82.95	2.34	32.70	0.00			1975	222222255
10	2300.5	2.080	1.916	27.760	36.967	45.761	34.728	34.726	4.20	101.22	2.35	33.00	0.00			2270	222222255
9	2604.7	1.904	1.715	27.778	36.995	45.800	34.730	34.728	4.14	111.69	2.39	33.60	0.00	0.005	0.000	2568	222222222
8	2904.3	1.756	1.542	27.789	37.016	45.930	34.728	34.732	4.16	118.48	2.43	33.50	0.00			2862	222222255
7	3204.7	1.620	1.380	27.799	37.035	45.858	34.726	34.725	4.23	121.70	2.41	33.90	0.00			3156	222222255
6	3505.6	1.398	1.133	27.809	37.059	45.895	34.717	34.716	4.40	125.70	2.40	33.90	0.00	0.000	0.000	3450	222222222
5	3809.0	1.199	0.909	27.819	37.082	45.930	34.711	34.710	4.53	127.56	2.39	34.00	0.00			3746	222222255
4	4106.0	1.088	0.769	27.825	37.096	45.951	34.707	34.708	4.63	128.19	2.36	33.60	0.00	0.001	0.000	4035	222222255
3	4410.8	1.037	0.686	27.829	37.104	45.964	34.705	34.702	4.69	129.44	2.35	33.70	0.00			4332	222222255
2	4711.7	1.056	0.670	27.829	37.105	45.966	34.704	34.705	4.69	129.46	2.34	33.60	0.00	0.000	0.000	4624	222222222
1	5068.2	1.095	0.666	27.829	37.106	45.967	34.704	34.705	4.69	128.66	2.33	33.60	0.00	0.002	0.000	4970	222222222

CRUISE: CD 29 STA: 56 DATE (D/M/Y): 1-12-87 TIME: 0133 LAT: 33 19.52 S LONG: 73 20 15 E

GRAVITY= 9.7959 M/S CORIOLIS= -.80124E-04 1/S SOUND SPEED= 1500.9 M/S Depth= 4109 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	0-V	DEPTH
DBAR	PTS68	PSS78	ML/L	PTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
0	18.458	35.747	4.77	18.458	25.731	34.220	42.343	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.458	35.747	4.77	18.458	25.731	34.220	42.343	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.470	35.805	5.26	18.466	25.773	34.261	42.383	0.045	0.0	0.04	2.130	-127.14	2.259	19.9
30	18.471	35.820	5.28	18.466	25.785	34.272	42.394	0.067	0.1	-6.47	0.264	-143.87	2.403	29.8
40	18.253	35.820	5.35	18.246	25.840	34.335	42.463	0.089	0.2	-15.21	1.302	-377.59	3.893	39.8
50	18.152	35.821	5.36	18.144	25.866	34.364	42.495	0.110	0.3	-17.02	-0.314	-314.44	3.552	49.7
100	17.612	35.801	5.26	17.595	25.986	34.503	42.651	0.214	1.1	-12.56	-1.753	-135.14	2.329	99.4
125	16.922	35.693	5.17	16.901	26.071	34.611	42.783	0.265	1.7	-55.03	-7.958	-544.80	4.676	124.3
150	15.618	35.543	5.08	15.594	26.259	34.847	43.062	0.312	2.3	-48.51	-4.886	-571.09	4.788	149.1
200	13.991	35.357	5.07	13.962	26.472	35.121	43.394	0.396	3.8	-20.74	-2.798	-178.95	2.688	198.8
250	13.287	35.260	5.18	13.252	26.544	35.221	43.519	0.475	5.6	-9.47	-1.311	-75.21	1.737	248.4
300	12.871	35.194	5.20	12.830	26.578	35.272	43.586	0.552	7.8	-8.75	-1.341	-59.37	1.544	298.0
350	12.482	35.131	5.24	12.434	26.607	35.317	43.647	0.628	10.3	-9.88	-1.580	-60.49	1.558	347.7
400	12.011	35.055	5.16	11.958	26.641	35.370	43.719	0.703	13.2	-7.59	-1.167	-47.24	1.377	397.3
450	11.521	34.982	5.19	11.463	26.677	35.427	43.795	0.778	16.4	-11.38	-1.641	-73.97	1.723	443.9
500	10.967	34.904	5.15	10.905	26.719	35.493	43.883	0.850	19.9	-9.73	-1.055	-80.90	1.802	496.4
600	10.063	34.796	5.15	9.991	26.795	35.609	44.036	0.991	27.8	-11.58	-1.439	-77.89	1.768	595.6
700	9.040	34.677	4.95	8.962	26.871	35.731	44.202	1.125	36.7	-9.58	-0.975	-71.08	1.689	694.6
800	7.670	34.555	4.65	7.589	26.985	35.909	44.438	1.252	46.4	-15.62	-1.235	-124.91	2.239	793.6
900	6.023	34.443	4.53	5.942	27.120	36.123	44.726	1.367	56.3	-15.63	-0.872	-128.88	2.274	892.6
1000	4.947	34.404	4.34	4.864	27.218	36.275	44.929	1.467	66.1	-5.96	-0.101	-59.44	1.545	991.5
1200	3.791	34.417	4.18	3.700	27.353	36.468	45.178	1.646	86.1	-5.24	0.200	-66.28	1.631	1189.1
1400	3.118	34.496	4.00	3.017	27.481	36.631	45.374	1.797	106.0	-2.38	0.477	-53.37	1.464	1386.5
1600	2.726	34.593	3.97	2.613	27.595	36.765	45.526	1.925	125.6	-1.43	0.435	-41.50	1.291	1583.6
1800	2.523	34.663	4.04	2.396	27.670	36.850	45.621	2.037	144.9	-1.22	0.324	-32.63	1.144	1780.6
2000	2.310	34.709	4.17	2.168	27.725	36.917	45.699	2.136	164.2	-1.29	0.131	-21.70	0.933	1977.4
2200	2.097	34.722	4.14	1.941	27.754	36.959	45.752	2.228	183.9	-0.71	0.032	-9.54	0.619	2174.0
2400	1.950	34.728	4.10	1.780	27.771	36.984	45.786	2.316	204.6	-0.73	0.017	-9.12	0.605	2370.4
2600	1.817	34.728	4.09	1.631	27.782	37.004	45.814	2.402	226.5	-0.63	-0.002	-6.97	0.529	2566.7
2800	1.720	34.726	4.12	1.517	27.789	37.018	45.833	2.486	249.7	-0.64	-0.008	-6.90	0.526	2762.7
3000	1.602	34.723	4.19	1.382	27.797	37.033	45.855	2.569	274.2	-0.67	-0.022	-6.63	0.516	2958.6
3200	1.505	34.720	4.23	1.268	27.802	37.045	45.873	2.651	300.0	-0.70	-0.018	-7.36	0.544	3154.3
3400	1.368	34.716	4.35	1.115	27.809	37.060	45.897	2.731	326.9	-0.69	-0.020	-7.40	0.545	3349.8
3600	1.293	34.713	4.40	1.021	27.814	37.070	45.912	2.809	354.8	-0.30	-0.007	-3.33	0.366	3545.2
3800	1.251	34.712	4.47	0.960	27.816	37.076	45.922	2.887	384.2	-0.27	-0.007	-3.09	0.352	3740.3
4000	1.238	34.711	4.50	0.927	27.818	37.080	45.927	2.965	415.3	-0.22	-0.006	-2.57	0.321	3935.3
4133	1.224	34.710	4.51	0.898	27.819	37.083	45.931	3.017	437.0	-0.24	-0.010	-2.57	0.000	4064.9

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	PTS68	PTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.5	18.492	18.492	25.723	34.210	42.332	35.747	35.827	5.30	1.52	0.20	0.00	0.00	2.300	1.243	3	222222222
23	102.6	17.467	17.449	26.020	34.541	42.694	35.799	35.778	5.19	0.92	0.23	0.00	0.00	2.189	1.378	101	222222222
22	203.1	13.801	13.772	26.507	35.163	43.442	35.351	35.327	5.10	2.76	0.63	0.00	0.00	2.426	1.249	201	222222222
21	304.4	12.935	12.893	26.558	35.250	43.562	35.185	35.203	5.17	4.20	0.75	0.70	0.00	2.423	1.329	301	222222222
20	395.8	12.226	12.174	26.603	35.324	43.664	35.060	35.086	5.33	3.81	0.86	10.40	0.00	2.289	1.236	392	222222222
18	604.8	10.288	10.215	26.751	35.555	43.974	34.789	34.826	5.10	6.27	1.19	15.70	0.00	1.591	0.859	599	222222222
17	701.3	9.186	9.107	26.848	35.701	44.165	34.676	34.692	5.00	7.51	1.38	18.70	0.00	1.240	0.652	694	222222222
16	800.6	7.775	7.693	26.969	35.888	44.413	34.554	34.564	4.65	14.44	1.71	23.80	0.00	0.842	0.373	792	222222222
15	901.5	6.336	6.253	27.080	36.067	44.657	34.442	34.460	4.48	24.24	2.02	27.80	0.00	0.530	0.285	892	222222222
14	1099.2	4.331	4.244	27.208	36.376	45.059	34.406	34.406	4.20	45.63	2.37	33.50	0.00	0.104	0.108	1087	222222222
13	1300.9	3.383	3.288	27.418	36.554	45.284	34.448	34.444	4.09	57.24	2.48	34.60	0.00	0.134	0.078	1286	222222222
12	1499.4	2.886	2.780	27.543	36.705	45.459	34.547	34.544	3.92	70.48	2.50	35.00	0.00	0.050	0.047	1482	222222222
11	1701.5	2.628	2.508	27.633	36.808	45.574	34.629	34.626	3.99	76.80	2.44	34.10	0.00			1681	222222255
10	1900.8	2.423	2.289	27.700	36.886	45.662	34.690	34.685	4.14	82.10	2.37	33.00	0.00			1877	222222255
9	2102.5	2.169	2.021	27.744	36.945	45.734	34.718	34.715	4.13	94.31	2.38	33.10	0.00	0.008	0.000	2075	222222222
8	2303.5	2.029	1.866	27.762	36.971	45.768	34.725	34.726	4.10	103.06	2.39	33.30	0.00			2273	222222255
7	2502.6	1.894	1.715	27.776	36.993	45.798	34.728	34.728	4.12	112.01	2.45	33.80	0.00			2468	222222255
6	2704.6	1.779	1.583	27.785	37.010	45.822	34.727	34.732	4.08	117.10	2.45	34.10	0.00			2666	222222255
5	3004.5	1.586	1.367	27.798	37.035	45.859	34.724	34.720	4.20	121.37	2.43	33.90	0.00			2960	222222255
4	3303.5	1.426	1.181	27.807	37.054	45.887	34.718	34.718		123.60	2.44	33.80	0.00			3252	225222255
3	3605.6	1.284	1.012	27.814	37.071	45.913	34.713	34.710	4.43	125.22	2.43	33.80	0.00			3547	222222255
1	4136.4	1.224	0.898	27.819	37.083	45.931	34.710	34.707	4.47	126.64	2.40	33.70	0.00	0.003	0.000	4065	222222222

CRUISE: CD 29 STA: 57 DATE (D/M/Y): 1-12-87 TIME: 1224 LAT: 32 40.09 S LONG: 74 39.66 E

GRAVITY= 9.7954 M/S CORIOLIS= -.78722E-04 1/S SOUND SPEED= 1500.3 M/S Depth= 3678 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.151	35.713	5.31	19.151	25.529	33.996	42.099	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
3	19.151	35.713	5.31	19.150	25.529	33.996	42.099	0.007	0.0	-0.36	0.000	0.00	0.000	3.0
20	19.142	35.857	5.63	19.139	25.642	34.108	42.210	0.048	0.0	-4.16	1.753	-185.98	2.756	19.9
30	19.099	35.871	5.61	19.094	25.664	34.131	42.234	0.071	0.1	-7.36	0.818	-194.46	2.818	29.8
40	19.031	35.875	5.54	19.024	25.685	34.155	42.259	0.094	0.2	-13.37	-0.365	-243.45	3.153	39.8
50	18.800	35.866	5.59	18.791	25.738	34.215	42.326	0.117	0.3	-36.87	-1.113	-659.42	5.190	49.7
100	17.750	35.773	5.71	17.733	25.931	34.443	42.588	0.225	1.1	-18.74	-2.008	-236.28	3.107	99.4
125	17.144	35.714	5.72	17.123	26.034	34.567	42.731	0.277	1.7	-29.61	-2.781	-395.76	4.021	124.3
150	16.533	35.633	5.74	16.509	26.117	34.672	42.856	0.326	2.4	-20.84	-2.162	-235.95	3.105	149.1
200	14.913	35.459	5.45	14.883	26.352	34.966	43.206	0.418	4.0	-23.05	-1.216	-323.98	3.638	198.8
250	13.859	35.349	5.36	13.823	26.495	35.149	43.426	0.501	5.9	-19.36	-2.882	-147.81	2.457	248.4
300	13.165	35.237	5.36	13.123	26.552	35.234	43.537	0.588	8.1	-11.71	-1.859	-78.96	1.773	298.1
350	12.677	35.159	5.40	12.629	26.591	35.293	43.615	0.657	10.7	-10.31	-1.565	-68.59	1.674	347.7
400	12.205	35.092	5.45	12.152	26.632	35.353	43.694	0.733	13.6	-8.38	-1.253	-54.58	1.492	397.3
450	11.778	35.025	5.41	11.719	26.662	35.402	43.759	0.808	16.9	-6.89	-1.009	-44.50	1.348	446.9
500	11.487	34.984	5.45	11.423	26.686	35.438	43.807	0.882	20.4	-8.45	-1.157	-57.73	1.536	496.5
600	10.632	34.867	5.34	10.559	26.751	35.540	43.944	1.027	28.6	-8.72	-1.083	-62.49	1.598	595.6
700	9.809	34.765	5.24	9.727	26.815	35.641	44.079	1.168	37.9	-9.59	-1.133	-66.97	1.654	694.7
800	8.783	34.655	4.98	8.694	26.897	35.769	44.250	1.302	48.2	-12.23	-1.157	-94.03	1.960	793.7
900	7.445	34.540	4.73	7.354	27.007	35.941	44.481	1.428	59.1	-13.56	-1.064	-105.05	2.072	892.6
1000	6.070	34.442	4.64	5.978	27.114	36.115	44.717	1.542	70.1	-13.14	-0.789	-104.25	2.064	991.5
1200	4.155	34.383	4.45	4.062	27.289	36.387	45.079	1.738	92.1	-6.30	0.231	-79.99	1.808	1189.2
1400	3.438	34.481	3.94	3.334	27.440	36.574	45.300	1.908	113.5	-2.69	0.490	-57.12	1.527	1386.6
1600	2.986	34.561	3.86	2.870	27.546	36.703	45.452	2.039	134.7	-2.18	0.357	-43.65	1.335	1583.8
1800	2.647	34.639	3.95	2.518	27.640	36.814	45.580	2.158	155.4	-1.33	0.328	-33.55	1.171	1780.7
2000	2.407	34.691	4.14	2.264	27.703	36.890	45.668	2.264	175.8	-1.26	0.189	-24.65	1.004	1977.5
2200	2.167	34.717	4.18	2.011	27.744	36.945	45.735	2.360	196.4	-1.12	0.069	-16.16	0.812	2174.1
2400	2.000	34.723	4.14	1.828	27.763	36.974	45.773	2.450	217.6	-0.98	0.018	-11.76	0.693	2370.6
2600	1.849	34.724	4.15	1.662	27.777	36.997	45.805	2.537	239.7	-0.64	0.002	-7.25	0.544	2566.8
2800	1.751	34.724	4.17	1.548	27.785	37.012	45.826	2.623	263.3	-0.59	-0.004	-6.40	0.511	2762.9
3000	1.640	34.722	4.23	1.420	27.793	37.027	45.847	2.707	288.1	-0.53	-0.012	-5.48	0.473	2958.7
3200	1.565	34.720	4.29	1.327	27.798	37.037	45.863	2.790	314.4	-0.41	-0.007	-4.44	0.426	3154.4
3400	1.483	34.718	4.32	1.228	27.803	37.048	45.879	2.872	342.2	-0.38	-0.008	-4.27	0.418	3350.0
3600	1.469	34.717	4.38	1.193	27.805	37.052	45.884	2.954	371.5	-0.34	-0.009	-3.71	0.390	3545.3
3789	1.419	34.716	4.39	1.124	27.809	37.059	45.896	3.032	400.8	-0.19	-0.001	-3.71	0.000	3729.7

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALTY
13	2.5	19.115	19.115	24.776	33.257	41.372	34.716	35.891	5.44	2.41	0.15	0.00	0.00	0.00	2.282	1.228	2	22222222
12	104.4	17.828	17.810	25.921	34.431	42.573	35.785	35.779	5.57	2.21	0.19	0.10	0.00	0.00	2.209	1.253	103	22222222
11	201.9	15.071	15.040	26.318	34.926	43.161	35.459	35.448	5.46	2.21	0.38	2.20	0.00	0.00	2.515	1.298	200	22222222
10	302.4	13.268	13.226	26.525	35.204	43.503	35.229	35.248	5.35	4.03	0.67	8.00	0.00	0.00	2.369	1.239	299	22222222
8	500.7	11.382	11.318	26.704	35.460	43.834	34.982	34.968	5.43	5.03	0.87	12.30	0.00	0.00	2.114	1.145	496	22222222
7	601.8	10.708	10.634	26.737	35.523	43.924	34.866	34.882	5.32	6.44	1.06	14.60	0.00	0.00	1.825	0.951	596	22222222
6	699.7	9.996	9.913	26.784	35.602	44.033	34.766	34.788	5.24	7.04	1.18	16.70	0.00	0.00	1.530	0.832	693	22222222
5	801.6	9.039	8.949	26.856	35.717	44.187	34.654	34.682	5.04	9.87	1.39	19.70	0.00	0.00	1.040	0.579	793	22222222
4	900.7	7.492	7.401	26.999	35.931	44.469	34.538	34.542	4.74	17.12	1.72	25.10	0.00	0.00	0.615	0.346	891	22222222
3	1001.0	6.147	6.055	27.104	36.101	44.780	34.441	34.447	4.67	24.77	1.96	28.40	0.00	0.00	0.462	0.266	990	22222222
2	1099.6	4.908	4.816	27.210	36.269	44.926	34.387	34.387	4.63	34.24	2.18	31.10	0.00	0.00	0.390	0.227	1088	22222222
1	1301.1	3.713	3.615	27.372	36.491	45.205	34.430	34.439	4.12	56.61	2.41	34.40	0.00	0.00			1287	22222255
24	1501.2	3.203	3.093	27.501	36.647	45.385	34.530	34.541	3.78	73.13	2.40	35.50	0.00	0.00	0.042	0.019	1404	22222222
23	1701.2	2.793	2.671	27.608	36.767	45.525	34.606	34.601	3.90	78.37	2.43	35.00	0.00	0.00			1681	22222255
22	1899.9	2.534	2.398	27.674	36.855	45.626	34.669	34.666	4.06	82.61	2.36	33.80	0.00	0.00			1876	22222255
21	2100.3	2.286	2.136	27.725	36.920	45.703	34.706	34.705	4.18	90.68	2.31	33.50	0.00	0.00	0.019	0.020	2073	22222222
20	2302.2	2.059	1.895	27.756	36.964	45.760	34.721	34.727	4.20	102.98	2.35	33.50	0.00	0.00	0.013	0.000	2272	22222222
19	2499.8	1.894	1.715	27.773	36.990	45.795	34.724	34.725	4.13	111.66	2.39	34.50	0.00	0.00	0.000	0.000	2465	22222222
18	2703.8	1.790	1.594	27.783	37.007	45.818	34.725	34.726	4.16	116.30	2.38	34.30	0.00	0.00	0.006	0.000	2665	22222222
16	3302.7	1.520	1.273	27.801	37.043	45.872	34.719	34.718	4.29	123.39	2.34	34.10	0.00	0.00			3251	22222255
14	3789.8	1.419	1.124	27.809	37.059	45.896	34.716	34.717		125.22	2.36	34.00	0.00	0.00	0.009		3727	22522225

CRUISE: CD 29 STA: 58 DATE (D/M/Y): 1-12-87 TIME: 2354 LAT: 31 59.89 S LONG: 76 0.09 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77281E-04 1/S SOUND SPEED= 1498.7 M/S Depth= 3388 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.803	35.598	5.39	18.803	25.530	34.010	42.124	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.803	35.598	5.39	18.802	25.530	34.010	42.124	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.814	35.784	5.61	18.811	25.670	34.147	42.259	0.047	0.0	-0.76	4.618	-282.01	3.425	19.9
30	18.757	35.817	5.67	18.752	25.711	34.189	42.302	0.071	0.1	-50.37	-1.356	-888.22	6.079	29.8
40	18.224	35.801	5.72	18.217	25.833	34.329	42.458	0.093	0.2	-8.02	3.413	-349.91	3.816	39.8
50	18.184	35.824	5.68	18.175	25.861	34.358	42.488	0.114	0.3	-6.55	0.218	-136.52	2.383	49.7
100	17.180	35.724	5.77	17.163	26.032	34.563	42.726	0.219	1.1	-29.99	-3.631	-333.90	3.727	99.4
125	16.248	35.596	5.74	16.228	26.155	34.719	42.913	0.267	1.6	-26.67	-3.424	-287.51	3.459	124.3
150	15.738	35.534	5.54	15.714	26.225	34.808	43.019	0.314	2.3	-35.07	-3.752	-381.02	3.982	149.1
200	14.150	35.373	5.31	14.121	26.451	35.094	43.360	0.400	3.8	-20.98	-2.605	-191.02	2.819	198.8
250	13.423	35.276	5.34	13.387	26.528	35.200	43.493	0.480	5.6	-12.66	-1.832	-93.72	1.975	248.4
300	12.853	35.188	5.40	12.812	26.577	35.271	43.587	0.557	7.8	-10.85	-1.674	-70.30	1.710	298.1
350	12.456	35.127	5.47	12.408	26.609	35.320	43.651	0.633	10.3	-7.47	-1.117	-48.51	1.421	347.7
400	12.084	35.068	5.44	12.031	26.637	35.364	43.709	0.709	13.2	-7.33	-1.125	-44.64	1.363	397.3
450	11.704	35.013	5.44	11.646	26.667	35.410	43.770	0.783	16.5	-6.57	-0.890	-45.66	1.378	446.9
500	11.303	34.957	5.42	11.239	26.699	35.459	43.835	0.857	20.0	-8.30	-1.123	-55.84	1.524	496.4
600	10.537	34.857	5.38	10.463	26.760	35.553	43.961	1.001	28.1	-8.47	-1.111	-55.28	1.517	595.6
700	9.698	34.743	5.44	9.617	26.816	35.647	44.090	1.141	37.4	-8.67	-1.145	-52.04	1.472	694.6
800	9.841	34.667	5.18	9.851	26.866	35.726	44.197	1.277	47.8	-7.79	-0.700	-61.27	1.597	793.6
900	7.820	34.565	4.81	7.726	26.973	35.890	44.413	1.407	59.0	-14.41	-1.177	-112.20	2.161	892.6
1000	6.466	34.466	4.64	6.371	27.083	36.064	44.648	1.525	70.5	-13.62	-0.852	-107.65	2.116	991.5
1200	4.450	34.407	4.32	4.353	27.277	36.359	45.037	1.726	93.0	-7.31	0.119	-82.99	1.858	1189.1
1400	3.378	34.469	4.04	3.275	27.436	36.573	45.303	1.891	114.8	-2.90	0.501	-58.67	1.562	1386.5
1600	3.001	34.567	3.83	2.885	27.550	36.706	45.454	2.030	136.0	-2.07	0.432	-46.30	1.388	1583.7
1800	2.675	34.648	3.93	2.546	27.638	36.811	45.575	2.150	156.7	-1.41	0.319	-33.14	1.174	1780.7
2000	2.423	34.695	4.13	2.280	27.705	36.892	45.668	2.255	177.2	-1.10	0.186	-22.34	0.964	1977.5
2200	2.164	34.721	4.21	2.008	27.747	36.948	45.739	2.351	197.7	-1.48	0.079	-20.23	0.917	2174.1
2400	1.947	34.726	4.18	1.777	27.769	36.983	45.785	2.440	218.6	-0.90	0.004	-9.82	0.639	2370.6
2600	1.812	34.726	4.21	1.626	27.781	37.003	45.813	2.526	240.5	-0.79	-0.008	-8.15	0.582	2566.8
2800	1.705	34.724	4.22	1.503	27.788	37.018	45.834	2.611	263.7	-0.45	-0.008	-4.53	0.434	2762.8
3000	1.652	34.723	4.24	1.431	27.793	37.026	45.846	2.694	288.5	-0.43	-0.007	-4.49	0.432	2958.7
3200	1.598	34.721	4.28	1.360	27.796	37.034	45.858	2.778	314.9	-0.26	-0.004	-2.88	0.346	3154.4
3400	1.577	34.720	4.31	1.318	27.799	37.039	45.865	2.861	343.1	-0.08	-0.001	-2.88	0.000	3349.9
3419	1.577	34.720	4.29	1.317	27.799	37.039	45.865	2.870	345.9	-0.04	0.000	-2.88	0.000	3368.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3	0	18.863	18.863	25.515	33.992	42.105	35.598	35.882	5.43	1.87	0.19	0.00	0.00	2.152	1.168	2
23	102.3	17.356	17.339	25.982	34.508	42.665	35.714	35.745	5.60	1.91	0.22	0.00	0.00	2.069	1.160	101	222222222
22	201.7	14.457	14.427	26.384	35.015	43.271	35.371	35.408	5.32	2.51	0.50	4.80	0.03	2.093	1.140	200	222222222
20	400.9	12.026	11.973	26.647	35.376	43.723	35.067	35.061	5.45	4.02	0.83	10.40	0.02	2.218	1.197	397	222222222
19	501.4	11.355	11.291	26.689	35.446	43.821	34.956	34.961	5.44	4.42	0.94	12.30	0.01	2.063	1.118	496	222222222
18	700.1	9.796	9.714	26.799	35.626	44.065	34.742	34.760	5.37	5.63	1.17	16.20	0.02	1.550	0.850	693	222222222
17	799.8	8.998	8.908	26.873	35.736	44.208	34.668	34.663	5.22	7.54	1.37	19.20	0.00	1.246	0.683	792	222222222
16	900.9	7.747	7.654	26.982	35.902	44.429	34.563	34.557	4.76	14.77	1.70	24.10	0.01	0.602	0.354	892	222222222
15	998.1	6.235	6.143	27.113	36.105	44.699	34.466	34.452	4.63	23.51	1.97	28.30	0.01	0.476	0.247	988	222222222
14	1099.0	5.052	5.037	27.207	36.258	44.908	34.403		4.55	33.46	2.19	31.10	0.01	0.316	0.193	1087	252222222
13	1199.1	4.293	4.198	27.294	36.384	45.069	34.407	34.405	4.30	45.42	2.34	33.10	0.00	0.170	0.115	1186	222222222
12	1397.2	3.360	3.257	27.437	36.575	45.306	34.469	34.474	4.04	62.40	2.48	35.20	0.01			1381	222222255
11	1597.5	3.035	2.919	27.546	36.700	45.447	34.566	34.564	3.78	76.76	2.53	35.50	0.01	0.023	0.000	1579	222222222
10	1799.3	2.691	2.562	27.637	36.809	45.572	34.640	34.634	3.91	80.98	2.45	34.60	0.00	0.024	0.000	1777	222222222
9	2001.7	2.415	2.272	27.705	36.892	45.669	34.695	34.694	4.15	84.30	2.34	33.10	0.00			1976	222222255
8	2199.6	2.162	2.005	27.748	36.949	45.739	34.721	34.721	4.22	93.34	2.31	32.70	0.01	0.013		2	222222225
7	2401.5	1.942	1.771	27.769	36.983	45.786	34.725	34.724	4.20	105.90	2.37	33.30	0.00	0.010	0.000	2369	222222222
6	2600.6	1.813	1.626	27.780	37.002	45.812	34.725	34.727	4.22	112.84	2.39	33.70	0.00			2564	222222255
5	2800.1	1.703	1.500	27.789	37.018	45.834	34.724	34.723	4.23	117.26	2.40	33.80	0.00			2760	222222255
4	3000.4	1.648	1.428	27.792	37.026	45.846	34.722	34.720	4.25	119.27	2.42	34.00	-0.01			2956	222222255
3	3202.9	1.588	1.349	27.798	37.036	45.860	34.722	34.719	4.27	121.78	2.42	34.10	0.01			3154	222222255
2	3302.9	1.573	1.560	27.798	37.037	45.863	34.720		4.27	121.38	2.44	34.00	0.00			3252	252222255
1	3421.4	1.578	1.318	27.799	37.038	45.864	34.720	34.716	4.28	121.98	2.42	34.00	0.00	0.000	0.000	3367	222222222

CRUISE: CD 29 STA: 59 DATE (D/M/Y): 2-12-87 TIME: 0826 LAT: 31 30.03 S LONG: 76 59.91 E

GRAVITY= 9.7944 M/S CORIOLIS= -.76203E-04 1/S SOUND SPEED= 1497.0 M/S Depth= 2962 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.900	35.649	4.42	18.900	25.544	34.020	42.131	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.900	35.649	4.42	18.900	25.544	34.020	42.131	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.726	35.836	5.46	18.723	25.732	34.212	42.325	0.046	0.0	-11.61	0.861	-269.57	3.373	19.9
30	18.654	35.837	5.45	18.649	25.752	34.234	42.350	0.069	0.1	-32.48	-4.246	-371.00	3.957	29.8
40	18.297	35.833	5.53	18.290	25.839	34.332	42.459	0.091	0.2	-16.74	2.967	-482.86	4.514	39.8
50	18.163	35.833	5.65	18.155	25.873	34.370	42.501	0.113	0.3	-9.81	-0.832	-135.40	2.390	49.7
100	17.090	35.690	5.77	17.074	26.027	34.562	42.728	0.217	1.1	-39.63	-6.003	-360.94	3.902	99.4
125	15.771	35.462	5.75	15.752	26.161	34.744	42.954	0.265	1.6	-40.86	-6.263	-331.95	3.743	124.3
150	14.935	35.406	5.42	14.912	26.305	34.919	43.158	0.311	2.3	-24.35	0.439	-447.07	4.343	149.1
200	13.807	35.329	5.23	13.779	26.488	35.144	43.424	0.394	3.8	-15.99	-1.909	-144.28	2.467	198.8
250	13.193	35.242	5.25	13.158	26.549	35.230	43.532	0.472	5.5	-10.56	-1.628	-69.47	1.712	248.4
300	12.745	35.173	5.34	12.704	26.587	35.286	43.605	0.549	7.7	-8.13	-1.228	-52.64	1.490	298.0
350	12.312	35.103	5.36	12.265	26.619	35.336	43.672	0.625	10.2	-7.62	-1.161	-47.01	1.408	347.7
400	11.976	35.053	5.47	11.923	26.645	35.377	43.726	0.700	13.1	-7.31	-1.066	-46.33	1.398	397.3
450	11.575	34.994	5.45	11.517	26.677	35.425	43.790	0.774	16.3	-6.26	-0.847	-42.32	1.336	446.9
500	11.266	34.953	5.45	11.202	26.703	35.464	43.842	0.847	19.8	-8.05	-1.095	-52.49	1.488	496.4
600	10.428	34.839	5.49	10.356	26.765	35.563	43.975	0.990	27.9	-7.29	-0.987	-44.04	1.363	595.6
700	9.731	34.746	5.48	9.649	26.813	35.643	44.084	1.130	37.1	-6.37	-0.770	-41.49	1.323	694.6
800	9.041	34.676	5.16	8.951	26.872	35.733	44.203	1.266	47.5	-10.20	-0.843	-83.88	1.881	793.6
900	7.425	34.537	4.76	7.334	27.008	35.943	44.484	1.394	58.6	-16.77	-1.366	-124.65	2.293	892.6
1000	6.017	34.442	4.60	5.926	27.121	36.124	44.729	1.507	69.6	-15.09	-0.851	-118.62	2.237	991.5
1200	4.197	34.415	4.22	4.103	27.310	36.405	45.095	1.700	91.1	-5.19	0.246	-67.10	1.683	1189.1
1400	3.335	34.469	4.03	3.232	27.440	36.579	45.311	1.861	112.5	-3.71	0.270	-52.25	1.485	1386.5
1600	2.915	34.566	3.90	2.800	27.557	36.718	45.470	1.998	133.4	-1.56	0.501	-44.78	1.375	1583.7
1800	2.665	34.648	3.92	2.536	27.645	36.819	45.583	2.117	153.9	-1.43	0.295	-31.51	1.153	1788.7
2000	2.415	34.701	4.11	2.272	27.710	36.897	45.674	2.221	174.2	-1.25	0.201	-24.47	1.016	1977.5
2200	2.202	34.731	4.35	2.045	27.753	36.952	45.740	2.316	194.5	-1.14	0.119	-18.80	0.891	2174.1
2400	2.017	34.742	4.45	1.845	27.777	36.987	45.785	2.405	215.2	-1.20	0.011	-13.29	0.749	2370.5
2600	1.819	34.739	4.46	1.632	27.791	37.013	45.822	2.489	236.8	-0.78	-0.022	-7.15	0.549	2566.8
2800	1.739	34.736	4.46	1.536	27.796	37.023	45.837	2.572	259.6	-0.24	-0.007	-2.23	0.307	2762.8
3000	1.730	34.735	4.44	1.508	27.797	37.026	45.842	2.655	284.3	-0.17	0.003	-2.23	0.000	2958.7
3033	1.720	34.735	4.49	1.495	27.798	37.028	45.844	2.669	288.5	-0.22	0.005	-2.23	0.000	2991.0

BOTL NO.	PRES DBAR	CTD TMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	12.7	18.736	18.734	25.725	34.204	42.317	35.830	35.853	5.47	1.50	0.20	0.10	0.00			12	222222255
23	103.1	16.809	16.792	26.077	34.622	42.796	35.667	35.646	5.63	1.51	0.26	0.20	0.00			102	222222255
22	201.8	13.956	13.927	26.457	35.107	43.381	35.328	35.347	5.30	2.52	0.50	6.20	0.00			200	222222255
21	301.2	12.902	12.860	26.556	35.249	43.562	35.173	35.197	5.39	3.54	0.72	8.90	0.00			298	222222255
20	403.1	12.067	12.014	26.625	35.353	43.699	35.049	35.064	5.43	3.96	0.82	10.70	0.00	2.169	1.228	399	222222222
19	500.6	11.392	11.328	26.679	35.435	43.808	34.952	34.971	5.47	4.17	0.91	12.20	0.00			496	222222255
18	601.2	10.455	10.382	26.759	35.556	43.967	34.837	34.843	5.53	4.18	1.02	14.00	0.00			595	222222255
17	701.7	9.772	9.689	26.806	35.633	44.073	34.745	34.751	5.46	4.99	1.15	15.90	0.00			695	222222255
16	800.5	9.018	8.929	26.875	35.737	44.208	34.675	34.675	5.11	7.82	1.37	19.60	0.00			792	222222255
15	900.3	7.605	7.513	26.980	35.907	44.440	34.535	34.543	4.76	15.07	1.72	24.90	0.00			891	222222255
14	999.5	6.056	5.965	27.117	36.119	44.721	34.443	34.442	4.59	24.94	2.00	28.90	0.00			989	222222255
13	1124.0	4.671	4.580	27.249	36.320	44.988	34.403	34.405	4.35	39.63	2.27	32.60	0.00	0.196	0.130	1112	222222222
12	1190.4	4.238	4.144	27.306	36.399	45.087	34.415	34.412	4.22	46.68	2.36	33.60	0.00			1185	222222255
11	1299.0	3.822	3.723	27.375	36.488	45.197	34.447	34.449	4.00	57.15	2.46	34.80	0.00			1285	222222255
10	1400.1	3.303	3.201	27.443	36.584	45.317	34.469	34.470	4.04	62.19	2.48	35.30	0.00			1384	222222255
9	1500.2	3.085	2.976	27.500	36.652	45.396	34.515	34.523	3.92	69.44	2.50	35.30	0.00			1483	222222255
8	1600.4	2.902	2.787	27.559	36.720	45.473	34.567	34.570	3.87	74.47	2.49	35.40	0.00			1582	222222255
7	1799.8	2.653	2.524	27.646	36.820	45.585	34.647	34.653	3.92	82.73	2.42	34.60	0.00	0.011	0.000	1778	222222222
6	1998.1	2.414	2.271	27.710	36.897	45.674	34.701	34.705	4.15	85.15	2.30	33.40	0.00			1973	222222255
5	2200.6	2.192	2.035	27.754	36.954	45.742	34.732	34.729	4.39	85.96	2.22	32.20	0.00			2172	222222255
4	2401.0	2.009	1.837	27.778	36.988	45.787	34.742	34.743	4.49	91.20	2.21	32.20	0.00			2369	222222255
3	2599.7	1.811	1.625	27.792	37.014	45.823	34.739	34.739	4.49	100.06	2.23	32.60	0.00			2563	222222255
2	2802.7	1.741	1.537	27.796	37.023	45.837	34.736	34.733	4.47	104.89	2.29	32.80	0.00			2762	222222255
1	3033.3	1.720	1.494	27.799	37.028	45.845	34.736	34.731	4.48	105.70	2.28	32.90	0.00	0.014	0.000	2988	222222222

CRUISE: CD 29 STA: 60 DATE (D/M/Y): 2-12-87 TIME: 1510 LAT: 31 7.67 S LONG: 77 44.36 E

GRAVITY= 9.7941 M/S CORIOLIS= -.75393E-04 1/S SOUND SPEED= 1496.7 M/S Depth= 3003 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.927	35.918	5.21	19.927	25.483	33.924	42.002	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.927	35.918	5.21	19.927	25.483	33.924	42.002	0.002	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.723	35.909	5.47	19.720	25.531	33.978	42.062	0.050	0.1	-26.46	-1.158	-448.44	4.373	19.9
30	19.502	35.899	5.51	19.496	25.581	34.035	42.126	0.074	0.1	-35.86	-2.430	-553.34	4.858	29.8
40	19.035	35.862	5.52	19.027	25.674	34.144	42.248	0.098	0.2	-77.25	-5.413	-1157.20	7.025	39.8
50	18.368	35.826	5.64	18.359	25.816	34.307	42.432	0.120	0.3	-21.90	-1.167	-341.32	3.815	49.7
100	16.927	35.681	5.66	16.911	26.059	34.600	42.771	0.226	1.1	-39.50	-5.056	-415.68	4.210	99.4
125	16.204	35.577	5.66	16.184	26.150	34.717	42.912	0.274	1.7	-13.52	1.081	-286.43	3.495	124.3
150	15.264	35.501	5.46	15.241	26.306	34.906	43.134	0.320	2.3	-40.15	-4.694	-422.51	4.245	149.1
200	13.716	35.314	5.32	13.688	26.496	35.155	43.438	0.404	3.8	-26.48	-3.747	-202.10	2.936	198.8
250	12.929	35.202	5.30	12.895	26.572	35.263	43.575	0.481	5.6	-13.14	-1.861	-92.45	1.966	248.4
300	12.465	35.130	5.41	12.424	26.609	35.319	43.649	0.557	7.7	-7.06	-1.121	-48.80	1.319	298.1
350	12.031	35.061	5.42	11.985	26.640	35.368	43.715	0.632	10.2	-8.18	-1.237	-48.92	1.444	347.7
400	11.679	35.009	5.47	11.627	26.667	35.411	43.772	0.706	13.0	-7.94	-1.172	-47.48	1.423	397.3
450	11.314	34.957	5.47	11.256	26.696	35.455	43.831	0.779	16.2	-7.35	-0.961	-49.50	1.453	446.9
500	10.987	34.912	5.55	10.924	26.721	35.494	43.884	0.851	19.7	-6.90	-0.906	-45.14	1.387	496.4
600	10.221	34.813	5.45	10.150	26.780	35.588	44.008	0.993	27.6	-7.73	-1.007	-47.37	1.421	595.6
700	9.373	34.707	5.31	9.293	26.842	35.687	44.143	1.130	36.7	-8.72	-0.937	-60.89	1.611	674.6
800	8.406	34.615	4.97	8.319	26.924	35.813	44.311	1.262	46.8	-13.27	-1.094	-102.50	2.091	793.6
900	6.899	34.499	4.71	6.811	27.050	36.011	44.575	1.383	57.3	-14.19	-1.017	-106.02	2.126	892.6
1000	5.453	34.411	4.63	5.366	27.166	36.197	44.827	1.492	67.8	-12.09	-0.564	-97.62	2.040	991.5
1200	3.966	34.415	4.26	3.874	27.333	36.440	45.141	1.678	88.7	-4.29	0.498	-71.54	1.747	1189.1
1400	3.530	34.526	3.68	3.425	27.467	36.595	45.317	1.834	109.3	-3.21	0.334	-50.53	1.468	1386.5
1600	2.885	34.581	3.85	2.770	27.572	36.734	45.487	1.968	129.7	-1.92	0.310	-36.61	1.250	1583.7
1800	2.639	34.646	3.98	2.510	27.646	36.821	45.586	2.085	149.9	-1.01	0.368	-31.25	1.154	1780.7
2000	2.403	34.701	4.15	2.260	27.711	36.899	45.676	2.188	170.0	-1.36	0.207	-25.67	1.046	1977.5
2200	2.142	34.733	4.35	1.986	27.759	36.961	45.752	2.282	190.0	-1.06	0.084	-15.73	0.819	2174.1
2400	1.968	34.741	4.44	1.797	27.780	36.993	45.794	2.369	210.4	-0.96	0.014	-10.76	0.677	2370.5
2600	1.809	34.740	4.48	1.623	27.792	37.015	45.824	2.452	231.0	-0.75	-0.026	-6.44	0.524	2566.7
2800	1.698	34.735	4.47	1.496	27.798	37.027	45.844	2.535	254.4	-0.51	-0.004	-5.33	0.477	2762.8
3000	1.607	34.735	4.54	1.387	27.806	37.041	45.864	2.616	278.5	-0.51	-0.007	-5.33	0.000	2958.6
3073	1.600	34.735	4.53	1.374	27.807	37.043	45.866	2.646	287.6	-0.17	0.001	-5.33	0.000	3030.1

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA KG/M3	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	8.2	19.888	19.887	25.493	33.935	42.014	35.917	35.920	5.35	1.97	0.16	0.30	0.00				8	222222255
23	102.1	16.626	16.610	26.120	34.671	42.851	35.667	35.632	5.70	1.79	0.23	0.50	0.00				101	222222255
22	197.2	13.640	13.612	26.521	35.183	43.468	35.326	35.301	5.35	2.41	0.64	6.80	0.00				195	222222255
21	304.1	12.443	12.402	26.611	35.322	43.653	35.127	35.125	5.43	3.65	0.76	9.60	0.00				301	222222255
20	401.0	11.659	11.607	26.670	35.414	43.776	35.007	35.009	5.52	3.87	0.86	11.30	0.00				397	222222255
19	501.7	10.958	10.896	26.726	35.500	43.890	34.911	34.907	5.50	4.29	0.97	13.00	0.00				497	222222255
18	601.4	10.217	10.145	26.781	35.588	44.009	34.812	34.814	5.46	4.71	1.10	15.00	0.00				595	222222255
17	701.3	9.336	9.256	26.847	35.694	44.151	34.706	34.701	5.31	6.36	1.29	17.90	0.00				694	222222255
16	800.4	8.356	8.271	26.929	35.821	44.321	34.613	34.609	4.90	10.86	1.55	22.30	0.00				792	222222255
15	900.3	6.995	6.907	27.036	35.992	44.552	34.498	34.504	4.69	18.62	1.83	26.30	0.00				891	222222255
14	1001.0	5.639	5.551	27.143	36.165	44.787	34.411	34.418	4.67	26.79	2.06	29.40	0.00				990	222222255
13	1102.2	4.580	4.491	27.255	36.330	45.002	34.398	34.385	4.53	37.40	2.26	32.00	0.00				1090	222222255
12	1201.6	3.956	3.866	27.334	36.441	45.142	34.414	34.414	4.26	49.64	2.39	33.90	0.00				1188	222222255
11	1301.0	3.733	3.635	27.411	36.529	45.241	34.482	34.482	3.78	64.32	2.52	35.30	0.00				1287	222222255
10	1399.4	3.482	3.377	27.471	36.602	45.326	34.526	34.528	3.67	71.67	2.53	35.80	0.00				1384	222222255
9	1501.2	3.094	2.985	27.528	36.679	45.422	34.551	34.555	3.87	74.73	2.52	35.60	0.00	0.027			1484	222222255
8	1602.5	2.873	2.759	27.574	36.737	45.491	34.583	34.580	3.86	76.18	2.48	35.20	0.00				1584	222222255
7	1803.2	2.618	2.490	27.649	36.825	45.592	34.648	34.655	3.97	82.30	2.42	34.40	0.00				1781	222222255
6	1999.1	2.397	2.254	27.711	36.899	45.677	34.700	34.703	4.16	85.17	2.33	33.40	0.00				1974	222222255
5	2201.5	2.128	1.971	27.760	36.963	45.755	34.733	34.741	4.37	89.87	2.25	32.30	0.00	0.002	0.000		2173	222222255
4	2400.5	1.959	1.788	27.781	36.994	45.795	34.741	34.737	4.46	93.76	2.23	32.10	0.00				2368	222222255
3	2606.2	1.791	1.604	27.793	37.016	45.827	34.739	34.734	4.46	101.91	2.26	32.50	0.00	0.000	0.000		2570	222222255
2	2805.6	1.695	1.492	27.798	37.028	45.844	34.735	34.734	4.48	106.62	2.29	32.70	0.00	0.000	0.000		2765	222222255
1	3074.1	1.601	1.375	27.807	37.044	45.866	34.736	34.737	4.50	108.05	2.26	32.50	0.00				3028	222222255

CRUISE: CD 29 STA: 61 DATE (D/M/Y): 2-12-87 TIME: 2212 LAT: 30 45.01 S LONG: 78 29.81 E

GRAVITY= 9.7938 M/S CORIOLIS= -.74568E-04 1/S SOUND SPEED= 1498.8 M/S Depth= 3471 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.646	35.923	4.88	19.646	25.561	34.010	42.096	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.646	35.923	4.88	19.646	25.561	34.010	42.096	0.002	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.607	35.930	5.70	19.604	25.577	34.028	42.115	0.048	0.0	-39.78	0.842	-805.46	5.893	19.9
30	19.272	35.937	5.59	19.267	25.670	34.131	42.227	0.072	0.1	-2.12	0.555	-71.06	1.750	29.8
40	19.234	35.941	5.63	19.227	25.683	34.145	42.243	0.095	0.2	-20.44	-1.493	-302.88	3.614	39.8
50	18.941	35.920	5.72	18.932	25.743	34.215	42.321	0.118	0.3	-26.43	-1.912	-388.30	4.092	49.7
100	17.037	35.729	5.67	17.020	26.070	34.606	42.773	0.222	1.1	-20.99	-2.272	-242.27	3.232	99.4
125	16.597	35.674	5.65	16.576	26.133	34.685	42.867	0.271	1.6	-22.45	-3.118	-199.78	2.935	124.3
150	15.653	35.554	5.53	15.630	26.259	34.845	43.059	0.318	2.3	-48.12	-5.637	-484.14	4.569	149.1
200	14.050	35.373	5.34	14.021	26.472	35.118	43.388	0.402	3.8	-21.93	-3.055	-171.46	2.719	198.8
250	13.078	35.229	5.34	13.043	26.562	35.248	43.554	0.480	5.6	-18.30	-2.674	-124.20	2.314	248.4
300	12.360	35.117	5.39	12.320	26.619	35.333	43.667	0.556	7.7	-11.85	-1.995	-60.28	1.612	298.1
350	11.919	35.047	5.46	11.873	26.650	35.384	43.735	0.630	10.2	-5.27	-0.665	-38.11	1.282	347.7
400	11.612	35.002	5.47	11.560	26.674	35.421	43.784	0.703	13.0	-7.08	-1.007	-43.49	1.369	397.3
450	11.242	34.950	5.49	11.185	26.703	35.465	43.844	0.776	16.1	-7.15	-0.992	-44.05	1.378	446.9
500	10.890	34.901	5.49	10.828	26.730	35.508	43.900	0.848	19.6	-7.15	-0.953	-44.88	1.391	496.4
600	10.150	34.803	5.44	10.079	26.785	35.595	44.019	0.989	27.5	-7.21	-0.902	-45.73	1.404	595.6
700	9.394	34.709	5.37	9.314	26.840	35.684	44.140	1.126	36.6	-8.03	-0.921	-51.76	1.494	694.6
800	8.472	34.618	4.95	8.386	26.915	35.802	44.296	1.258	46.7	-11.16	-0.977	-82.61	1.887	793.6
900	7.150	34.513	4.70	7.062	27.027	35.975	44.528	1.381	57.4	-13.65	-0.927	-105.55	2.133	892.6
1000	5.662	34.423	4.54	5.574	27.150	36.171	44.791	1.492	68.1	-13.24	-0.636	-105.48	2.133	991.5
1200	4.835	34.425	4.16	3.942	27.335	36.437	45.135	1.679	89.1	-4.26	0.421	-66.12	1.688	1189.1
1400	3.532	34.521	3.71	3.427	27.463	36.591	45.312	1.836	109.8	-2.34	0.485	-50.48	1.475	1386.5
1600	3.134	34.603	3.59	3.016	27.567	36.715	45.456	1.971	130.5	-2.36	0.257	-37.67	1.275	1583.7
1800	2.779	34.651	3.78	2.648	27.638	36.806	45.564	2.091	151.1	-2.29	0.192	-33.37	1.199	1780.7
2000	2.467	34.699	3.99	2.324	27.704	36.888	45.662	2.196	171.6	-1.05	0.177	-20.51	0.940	1977.5
2200	2.236	34.722	4.13	2.078	27.742	36.940	45.726	2.293	192.3	-1.37	0.116	-20.56	0.942	2174.1
2400	2.012	34.744	4.43	1.840	27.779	36.990	45.788	2.382	213.2	-1.14	0.036	-13.84	0.772	2370.5
2600	1.779	34.741	4.46	1.593	27.795	37.019	45.830	2.466	234.5	-1.09	-0.040	-9.20	0.630	2566.7
2800	1.660	34.737	4.48	1.458	27.802	37.033	45.852	2.547	256.9	-0.43	0.003	-4.78	0.454	2762.8
3000	1.591	34.737	4.55	1.372	27.808	37.045	45.868	2.627	280.7	-0.51	-0.006	-5.26	0.476	2958.6
3200	1.531	34.734	4.57	1.294	27.812	37.053	45.880	2.707	305.9	-0.33	-0.008	-3.26	0.375	3154.3
3400	1.492	34.733	4.60	1.236	27.815	37.059	45.889	2.787	332.8	-0.22	-0.007	-2.22	0.309	3349.9
3557	1.487	34.733	4.61	1.215	27.816	37.061	45.893	2.850	355.2	-0.16	-0.002	-2.22	0.000	3503.2

BOTL	PRES	CTDMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.2	19.624	19.624	25.566	34.017	42.103	35.923	35.928	5.42	1.60	0.17	0.10	0.00			3	222222255
23	181.1	17.348	17.331	25.995	34.521	42.678	35.729	35.761	5.65	1.42	0.22	0.10	0.00			100	222222255
22	201.4	14.577	14.547	26.359	34.986	43.238	35.372	35.440	5.31	2.04	0.48	4.20	0.00			199	222222255
21	301.0	12.763	12.722	26.538	35.237	43.557	35.115	35.176	5.39	3.48	0.72	8.90	0.00			299	222222255
20	401.0	11.757	11.705	26.646	35.387	43.745	35.001	35.022	5.50	3.70	0.86	10.90	0.00			397	222222255
19	550.3	10.673	10.606	26.731	35.518	43.920	34.851	34.872	5.49	4.32	1.00	13.40	0.00			545	222222255
18	700.0	9.357	9.277	26.846	35.692	44.148	34.709	34.704	5.29	6.16	1.24	17.70	0.00			694	222222255
17	798.9	8.319	8.206	26.940	35.833	44.334	34.619		4.88	11.03	1.53	22.00	0.00			791	252222255
16	900.0	6.930	6.843	27.059	36.017	44.580	34.515	34.499	4.64	19.13	1.81	26.30	0.00			891	222222255
15	1000.5	5.604	5.516	27.157	36.180	44.804	34.423	34.418	4.56	28.43	2.06	29.60	0.00			990	222222255
14	1099.6	4.643	4.631	27.245	36.317	44.986	34.394		4.42	38.95	2.22	31.86	0.00			1088	252222255
13	1199.0	4.024	3.931	27.334	36.437	45.135	34.422	34.427	4.14	51.28	2.35	33.60	0.00			1187	222222255
12	1399.4	3.491	3.387	27.466	36.596	45.320	34.520	34.515	3.67	70.88	2.49	35.20	0.00			1384	222222255
11	1596.9	3.124	3.006	27.568	36.717	45.458	34.603	34.600	3.54	83.61	2.52	35.40	0.00			1578	222222255
10	1798.4	2.698	2.569	27.645	36.817	45.579	34.651	34.648	3.85	84.62	2.41	34.40	0.00			1776	222222255
9	2000.5	2.415	2.272	27.708	36.896	45.672	34.699	34.704	3.95	93.91	2.37	33.60	0.00			1975	222222255
8	2200.0	2.178	2.021	27.747	36.948	45.737	34.722	34.729	4.22	93.92	2.30	32.60	0.00			2172	222222255
7	2401.0	1.987	1.816	27.781	36.992	45.792	34.744	34.745	4.48	91.49	2.20	31.60	0.00			2369	222222255
6	2602.2	1.748	1.563	27.798	37.023	45.836	34.741	34.738	4.48	102.20	2.26	32.10	0.00			2566	222222255
5	2803.4	1.651	1.449	27.802	37.034	45.853	34.736	34.734	4.50	105.62	2.25	32.20	0.00			2763	222222255
4	3005.6	1.592	1.509	27.808	37.045	45.860	34.737		4.55	107.04	2.25	32.20	0.00			2961	252222255
3	3203.0	1.529	1.292	27.812	37.053	45.881	34.735	34.737	4.57	109.46	2.26	32.40	0.00			3155	222222255
2	3305.6	1.511	1.264	27.814	37.056	45.885	34.734	34.733	4.59	109.67	2.26	32.30	0.00			3254	222222255
1	3556.4	1.485	1.213	27.816	37.062	45.893	34.733	34.728	4.56	111.48	2.26	32.40	0.00			3499	222222255

CRUISE: CD 29 STA: 62 DATE (D/M/Y): 3-12-87 TIME: 0522 LAT: 38 22.43 S LONG: 79 15.32 E

GRAVITY= 9.7935 M/S CORIOLIS= -.73744E-04 1/S SOUND SPEED= 1499.5 M/S Depth= 3739 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.312	35.824	4.95	19.312	25.572	34.033	42.129	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.312	35.824	4.95	19.312	25.572	34.033	42.129	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.972	35.783	5.43	18.968	25.629	34.102	42.209	0.048	0.0	-21.43	-4.667	-138.33	2.456	19.9
30	18.579	35.715	5.53	18.574	25.677	34.163	42.282	0.071	0.1	-49.58	-2.055	-790.72	5.871	29.8
40	18.369	35.779	5.52	18.362	25.780	34.271	42.397	0.094	0.2	-4.80	2.362	-217.51	3.079	39.8
50	18.017	35.697	5.56	18.009	25.805	34.309	42.446	0.116	0.3	-22.31	-5.429	-100.06	2.089	49.7
100	16.342	35.629	5.59	16.326	26.157	34.718	42.908	0.217	1.1	-26.26	-2.620	-296.72	3.597	99.4
125	15.457	35.521	5.34	15.437	26.277	34.870	43.091	0.263	1.6	-41.52	-3.702	-477.18	4.561	124.3
150	14.568	35.451	5.27	14.545	26.420	35.046	43.297	0.305	2.2	-26.55	-2.830	-272.26	3.445	149.1
200	13.620	35.318	5.26	13.591	26.519	35.183	43.468	0.385	3.6	-12.15	-1.680	-91.01	1.992	198.8
250	12.946	35.214	5.33	12.911	26.577	35.267	43.579	0.462	5.4	-12.03	-1.946	-69.39	1.739	248.4
300	12.409	35.126	5.38	12.368	26.616	35.329	43.661	0.538	7.5	-9.67	-1.491	-56.62	1.571	298.0
350	11.836	35.037	5.46	11.791	26.659	35.395	43.750	0.612	9.9	-10.67	-1.617	-60.64	1.626	347.6
400	11.443	34.980	5.46	11.392	26.688	35.442	43.812	0.684	12.7	-6.86	-0.977	-40.92	1.336	397.3
450	11.096	34.930	5.54	11.040	26.715	35.483	43.867	0.756	15.8	-7.55	-1.047	-45.24	1.404	446.8
500	10.705	34.876	5.59	10.644	26.743	35.529	43.929	0.828	19.3	-8.22	-1.134	-47.71	1.442	496.4
600	9.873	34.766	5.48	9.802	26.803	35.625	44.060	0.967	27.1	-8.85	-1.143	-51.82	1.503	595.5
700	9.153	34.675	5.34	9.074	26.852	35.707	44.173	1.102	36.1	-7.38	-0.805	-47.94	1.446	694.6
800	8.107	34.580	4.89	8.023	26.941	35.844	44.354	1.232	46.0	-13.25	-1.035	-101.59	2.104	793.6
900	6.720	34.480	4.61	6.634	27.059	36.028	44.600	1.352	56.4	-14.71	-0.933	-112.15	2.211	892.6
1000	5.419	34.414	4.52	5.333	27.172	36.205	44.837	1.460	66.8	-12.54	-0.497	-101.68	2.105	991.4
1200	3.960	34.446	3.99	3.868	27.359	36.466	45.167	1.641	87.1	-4.27	0.513	-70.02	1.747	1189.1
1400	3.407	34.545	3.59	3.303	27.493	36.628	45.355	1.791	106.9	-1.89	0.377	-39.40	1.311	1386.4
1600	3.066	34.618	3.56	2.949	27.585	36.737	45.481	1.922	126.9	-1.54	0.348	-34.63	1.229	1583.6
1800	2.815	34.675	3.61	2.683	27.654	36.819	45.576	2.038	147.1	-1.37	0.215	-25.59	1.056	1780.6
2000	2.543	34.701	3.78	2.398	27.700	36.880	45.650	2.144	167.7	-1.48	0.081	-19.17	0.914	1977.4
2200	2.263	34.719	4.13	2.105	27.739	36.934	45.719	2.243	188.7	-1.23	0.112	-18.63	0.901	2174.0
2400	2.053	34.738	4.37	1.881	27.772	36.979	45.776	2.334	210.0	-1.12	0.055	-14.57	0.797	2370.4
2600	1.856	34.743	4.48	1.669	27.791	37.011	45.818	2.419	231.8	-0.99	-0.009	-9.80	0.654	2566.7
2800	1.681	34.739	4.50	1.479	27.802	37.032	45.850	2.501	254.4	-0.88	-0.020	-8.26	0.600	2762.7
3000	1.541	34.734	4.53	1.323	27.810	37.049	45.874	2.581	278.1	-0.72	-0.020	-6.67	0.539	2958.6
3200	1.456	34.731	4.56	1.221	27.815	37.059	45.891	2.660	302.8	-0.40	-0.009	-3.90	0.412	3154.3
3400	1.411	34.729	4.59	1.157	27.817	37.066	45.900	2.738	329.1	-0.24	-0.009	-2.18	0.308	3349.8
3600	1.398	34.728	4.61	1.124	27.818	37.069	45.905	2.816	357.2	-0.09	-0.005	-0.78	0.184	3545.2
3795	1.413	34.727	4.57	1.118	27.818	37.069	45.906	2.894	386.5	-0.02	-0.001	-0.78	0.000	3735.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	22.3	18.901	18.897	25.641	34.116	42.225	35.775	35.772	5.45	1.45	0.23	0.00	0.00	2.186	1.160	22	222222222
25	102.1	18.281	18.281	26.167	34.731	42.923	35.624	35.622	5.67	1.28	0.27	0.00	0.00	2.198	1.247	101	222222222
22	201.3	13.675	13.646	26.507	35.168	43.452	35.317	35.335	5.31	2.11	0.59	6.20	0.00	2.271	1.150	199	222222222
21	301.4	12.342	12.301	26.628	35.343	43.678	35.124	35.121	5.43	3.36	0.77	9.60	0.00	2.307	1.305	298	222222222
20	401.0	11.428	11.377	26.690	35.444	43.815	34.978	34.975	5.50	3.79	0.90	11.60	0.00	2.223	1.268	397	222222222
19	499.9	10.728	10.666	26.740	35.525	43.924	34.877	34.875	5.54	4.22	0.98	12.90	0.00	2.140	1.238	495	222222222
18	702.1	9.263	9.183	26.833	35.683	44.144	34.673	34.686	5.37	5.87	1.26	17.60	0.00	1.540	0.860	695	222222222
17	798.9	8.320	8.287	26.910	35.803	44.305	34.581		4.94	10.56	1.53	21.90	0.00	0.627	0.476	791	252222222
16	1000.5	5.379	5.293	27.177	36.211	44.845	34.414	34.410	4.55	30.48	2.12	30.30	0.00	0.315	0.188	990	222222222
15	1099.0	4.419	4.331	27.277	36.360	45.040	34.404	34.408	4.30	44.31	2.31	32.60	0.00	0.173	0.096	1087	222222222
14	1297.5	3.680	3.582	27.435	36.555	45.269	34.505	34.493	3.74	67.69	2.50	35.10	0.00	0.029		1283	222222225
13	1501.3	3.279	3.168	27.535	36.676	45.409	34.581	34.572	3.65	80.91	2.54	35.50	0.00	0.011	0.000	1484	222222222
12	1699.6	2.960	2.835	27.620	36.777	45.526	34.649	34.646	3.53	91.09	2.51	35.30	0.00			1679	222222255
11	1900.1	2.701	2.563	27.677	36.849	45.611	34.691	34.689	3.61	99.44	2.48	34.90	0.00			1877	222222255
10	2097.5	2.431	2.280	27.715	36.902	45.678	34.708	34.704	3.93	97.44	2.40	33.90	0.00			2071	222222255
9	2301.1	2.182	2.016	27.755	36.955	45.745	34.731	34.729	4.34	89.14	2.25	32.00	0.00	0.009	0.000	2271	222222222
8	2500.2	1.956	1.776	27.782	36.996	45.798	34.742	34.742	4.49	94.66	2.26	31.70	0.00			2466	222222255
7	2701.7	1.770	1.575	27.798	37.023	45.835	34.742	34.742	4.55	100.18	2.24	32.10	0.00	0.003	0.000	2663	222222222
6	2906.0	1.609	1.398	27.807	37.041	45.863	34.737	34.735	4.54	106.29	2.27	32.10	0.00	0.006	0.000	2863	222222222
5	3103.7	1.484	1.257	27.813	37.056	45.885	34.733	34.732	4.59	111.60	2.28	32.50	0.00	0.007	0.000	3057	222222222
3	3506.4	1.400	1.136	27.818	37.067	45.903	34.728	34.726	4.60	115.29	2.29	32.60	0.00	0.000	0.000	3450	222222222
2	3705.7	1.404	1.119	27.818	37.069	45.905	34.727	34.726	4.62	116.13	2.29	32.70	0.00			3645	222222255
1	3797.0	1.413	1.118	27.818	37.069	45.905	34.727	34.726	4.61	116.36	2.29	32.80	0.00	0.010	0.000	3734	222222222

CRUISE: CD 29 STA: 63 DATE (D/M/Y): 3-12-87 TIME: 1241 LAT: 30 0.44 S LONG: 80 0.14 E

GRAVITY= 9.7932 M/S CORIOLIS= -.72937E-04 1/S SOUND SPEED= 1498.8 M/S Depth= 3476 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	20.074	35.625	4.94	20.074	25.220	33.660	41.738	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.074	35.625	4.94	20.073	25.220	33.661	41.738	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.833	35.890	5.50	19.830	25.487	33.931	42.012	0.052	0.1	-3.58	0.876	-115.15	2.253	19.9
30	19.813	35.898	5.48	19.807	25.499	33.944	42.025	0.077	0.1	-6.64	0.103	-130.66	2.400	29.8
40	19.596	35.896	5.52	19.589	25.555	34.007	42.095	0.101	0.2	-27.32	1.028	-567.46	5.001	39.8
50	19.469	35.904	5.54	19.460	25.594	34.050	42.141	0.125	0.3	-16.37	-0.282	-289.47	3.572	49.7
100	17.488	35.782	5.60	17.471	26.002	34.523	42.675	0.236	1.2	-31.18	-3.093	-377.28	4.078	99.5
125	16.813	35.697	5.56	16.792	26.100	34.644	42.819	0.286	1.7	-42.45	-5.528	-419.27	4.299	124.3
150	15.547	35.554	5.36	15.523	26.283	34.873	43.090	0.332	2.4	-45.87	-4.743	-503.65	4.712	149.1
200	14.004	35.387	5.20	14.054	26.476	35.121	43.390	0.416	3.9	-15.00	-1.718	-135.65	2.445	198.8
250	13.339	35.274	5.28	13.304	26.544	35.219	43.515	0.495	5.7	-14.99	-2.363	-92.68	2.021	248.4
300	12.569	35.155	5.31	12.529	26.607	35.313	43.639	0.571	7.8	-12.81	-1.966	-76.82	1.840	298.1
350	12.033	35.069	5.42	11.987	26.646	35.374	43.721	0.646	10.3	-10.47	-1.653	-56.63	1.588	347.7
400	11.630	35.008	5.40	11.578	26.676	35.421	43.784	0.720	13.1	-7.47	-1.047	-45.92	1.423	397.3
450	11.217	34.949	5.48	11.161	26.707	35.470	43.850	0.792	16.2	-9.76	-1.452	-52.98	1.528	446.9
500	10.779	34.887	5.57	10.717	26.739	35.521	43.919	0.863	19.7	-7.02	-0.928	-42.88	1.375	496.5
600	10.034	34.788	5.50	9.963	26.793	35.608	44.036	1.003	27.6	-7.58	-0.978	-44.57	1.402	595.6
700	9.227	34.684	5.38	9.148	26.847	35.699	44.161	1.140	36.6	-8.96	-1.040	-54.71	1.553	694.6
800	8.232	34.589	4.95	8.147	26.930	35.827	44.332	1.271	46.6	-12.04	-0.957	-90.93	2.002	793.6
900	6.787	34.484	4.63	6.681	27.056	36.022	44.592	1.392	57.1	-15.00	-0.969	-112.31	2.225	892.6
1000	5.382	34.413	4.47	5.296	27.175	36.210	44.844	1.499	67.5	-11.90	-0.345	-102.31	2.124	991.5
1200	3.988	34.454	3.92	3.896	27.363	36.467	45.167	1.680	87.7	-3.51	0.470	-59.82	1.624	1189.1
1400	3.402	34.545	3.61	3.298	27.494	36.628	45.356	1.832	107.8	-2.43	0.401	-45.48	1.416	1386.5
1600	3.072	34.609	3.60	2.955	27.577	36.729	45.473	1.963	127.8	-1.40	0.360	-33.50	1.215	1583.7
1800	2.830	34.670	3.60	2.699	27.649	36.814	45.569	2.080	148.1	-1.35	0.206	-24.66	1.043	1780.7
2000	2.590	34.699	3.74	2.445	27.694	36.871	45.639	2.187	168.9	-1.49	0.109	-20.60	0.953	1977.5
2200	2.314	34.716	3.94	2.155	27.732	36.925	45.707	2.287	190.2	-1.20	0.057	-15.19	0.818	2174.1
2400	2.109	34.730	4.22	1.936	27.760	36.965	45.759	2.388	212.1	-0.99	0.087	-14.91	0.811	2370.5
2600	1.907	34.741	4.40	1.719	27.786	37.003	45.808	2.468	234.5	-1.88	0.018	-12.23	0.734	2566.7
2800	1.725	34.740	4.50	1.522	27.800	37.028	45.843	2.552	257.5	-0.96	-0.014	-9.40	0.644	2762.8
3000	1.578	34.736	4.52	1.359	27.808	37.045	45.869	2.633	281.4	-0.87	-0.025	-8.03	0.595	2958.7
3200	1.465	34.733	4.57	1.230	27.815	37.059	45.890	2.711	306.3	-0.49	-0.016	-4.48	0.444	3154.3
3400	1.405	34.730	4.59	1.151	27.818	37.067	45.902	2.789	332.6	-0.30	-0.014	-2.62	0.340	3349.9
3565	1.382	34.728	4.58	1.112	27.819	37.070	45.907	2.854	355.4	-0.16	-0.007	-2.62	0.000	3511.0

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	15.3	19.832	19.830	25.483	33.927	42.008	35.884	35.917	5.36	1.22	0.14	0.00	0.00	0.00			15	222222255
23	102.7	17.699	17.682	25.943	34.457	42.603	35.772	35.811	5.59	1.07	0.18	0.00	0.00	0.00			101	222222255
22	204.4	14.313	14.283	26.414	35.051	43.312	35.371	35.403	5.31	1.52	0.49	4.90	0.00	0.00			202	222222255
21	304.2	12.556	12.515	26.601	35.307	43.634	35.143	35.154	5.39	2.77	0.71	8.80	0.00	0.00			301	222222255
20	402.8	11.665	11.612	26.667	35.411	43.773	35.005	35.013	5.47	3.44	0.85	11.00	0.00	0.00			399	222222255
19	500.9	10.759	10.697	26.742	35.525	43.923	34.886	34.885	5.51	3.69	0.97	13.00	0.00	0.00			496	222222255
18	701.2	9.228	9.149	26.846	35.697	44.160	34.682	34.687	5.37	5.56	1.24	17.60	0.00	0.00			694	222222255
17	803.1	8.234	8.149	26.928	35.826	44.331	34.588	34.590	4.90	10.68	1.55	22.30	0.00	0.00			795	222222255
16	899.4	6.857	6.770	27.044	36.306	44.572	34.484	34.489	4.63	19.06	1.85	26.60	0.00	0.00			890	222222255
15	1098.8	4.413	4.325	27.283	36.366	45.046	34.410	34.420	4.25	44.92	2.35	32.70	0.00	0.00			1087	222222255
14	1301.7	3.737	3.638	27.422	36.540	45.251	34.496	34.493	3.67	66.54	2.52	35.00	0.00	0.00			1287	222222255
13	1499.7	3.241	3.130	27.535	36.678	45.413	34.576	34.574	3.54	79.83	2.56	35.50	0.00	0.00			1482	222222255
12	1701.1	2.945	2.821	27.619	36.777	45.527	34.646	34.648	3.54	90.69	2.54	35.20	0.00	0.00			1681	222222255
11	1898.9	2.697	2.559	27.675	36.847	45.609	34.688	34.688	3.65	97.69	2.51	34.80	0.00	0.00			1875	222222255
10	2100.5	2.404	2.252	27.719	36.907	45.685	34.710	34.710	3.87	101.24	2.44	34.10	0.00	0.00			2073	222222255
9	2303.8	2.188	2.022	27.746	36.947	45.736	34.721	34.730	4.08	100.51	2.38	33.30	0.00	0.00			2273	222222255
8	2504.4	2.015	1.834	27.775	36.985	45.784	34.738	34.738	4.40	95.09	2.27	32.00	0.00	0.00			2470	222222255
7	2700.8	1.813	1.617	27.795	37.017	45.827	34.742	34.741	4.49	100.48	2.26	32.00	0.00	0.00			2663	222222255
6	2904.3	1.661	1.449	27.804	37.036	45.855	34.739	34.739	4.55	105.25	2.28	32.10	0.00	0.00			2862	222222255
5	3101.9	1.507	1.280	27.813	37.054	45.882	34.734	34.735		111.26	2.29	32.30	0.00	0.00			3055	225222255
4	3304.9	1.425	1.180	27.817	37.064	45.898	34.731	34.730	4.60	113.80	2.31	32.50	0.00	0.00			3254	222222255
3	3405.3	1.401	1.380	27.819	37.068	45.903	34.730		4.59	115.12	2.33	32.70	0.00	0.00			3352	252222255
2	3511.5	1.388	1.123	27.819	37.070	45.906	34.729	34.726	4.60	116.02	2.32	32.70	0.00	0.00			3455	222222255
1	3568.4	1.383	1.112	27.819	37.070	45.907	34.728	34.729	4.57	116.72	2.32	32.80	0.00	0.00			3511	222222255

CRUISE: CD 29 STA: 64 DATE (D/M/Y): 3-12-87 TIME: 2125 LAT: 29 30.23 S LONG: 80 59.51 E

GRAVITY= 9.7929 M/S CORIOLIS= -.71825E-04 1/S SOUND SPEED= 1501.5 M/S Depth= 4129 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.742	35.945	4.97	19.742	25.552	33.998	42.081	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.742	35.945	4.97	19.742	25.552	33.998	42.081	0.002	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.719	35.947	5.56	19.715	25.561	34.008	42.091	0.049	0.0	-23.78	-0.085	-434.34	4.409	19.9
30	19.243	35.925	5.57	19.237	25.668	34.130	42.228	0.072	0.1	-62.53	-4.812	-879.07	6.273	29.8
40	18.750	35.880	5.69	18.743	25.761	34.239	42.352	0.095	0.2	-32.33	-3.604	-385.92	4.156	39.8
50	18.515	35.856	5.71	18.506	25.802	34.288	42.408	0.117	0.3	-14.59	-1.278	-190.85	2.923	49.7
100	16.582	35.685	5.60	16.565	26.144	34.696	42.878	0.220	1.1	-56.50	-6.667	-573.38	5.066	99.4
125	15.026	35.500	5.30	15.007	26.357	34.966	43.201	0.265	1.6	-42.10	-4.698	-428.04	4.377	124.3
150	14.519	35.441	5.31	14.496	26.423	35.051	43.304	0.307	2.2	-21.78	-2.756	-178.39	2.826	149.1
200	13.293	35.257	5.28	13.265	26.539	35.215	43.513	0.388	3.6	-19.14	-3.170	-107.98	2.198	198.8
250	12.674	35.168	5.36	12.640	26.598	35.297	43.619	0.463	5.3	-9.46	-1.326	-62.43	1.672	248.4
300	12.127	35.076	5.47	12.088	26.632	35.356	43.700	0.537	7.4	-11.22	-1.917	-52.02	1.526	298.0
350	11.739	35.019	5.48	11.693	26.663	35.403	43.762	0.610	9.9	-6.85	-1.021	-38.26	1.309	347.6
400	11.314	34.957	5.52	11.264	26.694	35.453	43.829	0.683	12.6	-8.30	-1.159	-48.88	1.479	397.2
450	10.955	34.910	5.56	10.899	26.724	35.498	43.889	0.755	15.7	-8.35	-1.044	-54.07	1.556	446.8
500	10.619	34.863	5.45	10.558	26.749	35.538	43.942	0.825	19.2	-6.42	-0.877	-36.25	1.274	496.4
600	9.816	34.755	5.47	9.746	26.804	35.629	44.066	0.964	27.0	-8.54	-1.076	-49.72	1.492	595.5
700	8.999	34.661	5.24	8.921	26.866	35.728	44.200	1.099	35.9	-9.80	-0.968	-66.43	1.724	694.6
800	7.867	34.561	4.81	7.785	26.961	35.875	44.396	1.227	45.7	-14.36	-1.143	-101.90	2.136	793.0
900	6.379	34.459	4.56	6.298	27.087	36.072	44.660	1.343	55.7	-13.39	-0.753	-100.36	2.119	892.5
1000	5.029	34.403	4.42	4.946	27.208	36.260	44.911	1.447	65.8	-11.71	-0.138	-107.61	2.195	991.4
1200	3.857	34.478	3.79	3.716	27.395	36.506	45.211	1.620	85.1	-3.45	0.464	-57.73	1.607	1189.0
1400	3.372	34.549	3.58	3.269	27.500	36.636	45.365	1.767	104.5	-2.08	0.368	-39.54	1.330	1386.4
1600	3.029	34.622	3.59	2.912	27.591	36.745	45.491	1.895	124.2	-1.49	0.344	-32.85	1.213	1583.6
1800	2.752	34.681	3.66	2.621	27.664	36.833	45.592	2.010	144.0	-1.35	0.195	-23.59	1.028	1780.6
2000	2.482	34.703	3.85	2.338	27.706	36.890	45.663	2.114	164.2	-1.65	0.088	-20.66	0.962	1977.4
2200	2.221	34.724	4.22	2.063	27.746	36.944	45.731	2.210	184.8	-1.17	0.096	-16.72	0.865	2174.0
2400	2.047	34.740	4.40	1.875	27.773	36.981	45.778	2.300	205.9	-1.09	0.030	-12.45	0.747	2370.4
2600	1.835	34.739	4.44	1.648	27.790	37.011	45.819	2.386	227.7	-1.04	-0.016	-9.69	0.659	2566.6
2800	1.682	34.736	4.46	1.479	27.800	37.030	45.848	2.468	250.3	-0.79	-0.014	-7.37	0.574	2762.7
3000	1.553	34.734	4.52	1.335	27.808	37.047	45.872	2.548	274.0	-0.71	-0.023	-6.28	0.530	2958.6
3200	1.446	34.730	4.55	1.211	27.814	37.060	45.891	2.627	298.9	-0.43	-0.017	-3.71	0.408	3154.3
3400	1.397	34.728	4.59	1.143	27.817	37.067	45.902	2.705	325.1	-0.30	-0.014	-2.60	0.341	3349.8
3600	1.377	34.727	4.61	1.103	27.819	37.070	45.908	2.783	353.0	-0.15	-0.006	-1.35	0.246	3545.1
3800	1.378	34.725	4.60	1.084	27.819	37.071	45.910	2.862	382.9	-0.07	-0.004	-0.59	0.163	3740.3
4000	1.386	34.724	4.62	1.070	27.819	37.073	45.912	2.943	415.0	-0.07	-0.004	-0.57	0.160	3935.3
4200	1.402	34.724	4.61	1.063	27.819	37.073	45.913	3.025	449.3	-0.02	-0.001	-0.57	0.000	4130.1
4219	1.404	34.724	4.61	1.063	27.819	37.073	45.913	3.032	452.6	-0.02	0.000	-0.57	0.000	4148.6

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	2.9	19.773	19.773	24.612	33.072	41.168	34.724	35.951	5.39	1.99	0.20	0.30	0.00	2.047	1.099		2	22222222
23	102.5	17.123	17.106	26.001	34.535	42.700	35.666	35.754	5.61	1.40	0.24	0.30	0.00	2.110	1.218		1.1	22222222
22	201.0	13.671	13.642	26.460	35.122	43.407	35.255	35.319	5.31	2.22	0.56	6.70	0.00	2.256	1.244		199	22222222
21	301.4	12.316	12.275	26.594	35.311	43.647	35.074	35.107	5.45	3.26	0.73	9.90	0.00	2.278	1.369		298	22222222
20	400.7	11.432	11.380	26.672	35.426	43.797	34.956	34.972	5.53	3.88	0.84	12.00	0.00	2.275	1.294		397	22222222
19	499.5	10.600	10.539	26.753	35.543	43.947	34.864	34.861	5.53	4.30	0.97	13.70	0.00	2.018	1.189		495	22222222
18	601.5	9.832	9.762	26.801	35.625	44.062	34.754	34.757	5.45	5.12	1.13	16.20	0.00	1.790	0.990		596	22222222
17	700.7	8.988	8.890	26.870	35.733	44.207	34.680	34.656	5.18	7.56	1.36	19.60	0.00	1.279	0.716		694	22222222
16	900.1	6.343	6.260	27.091	36.078	44.667	34.458	34.459	4.56	22.89	1.94	28.60	0.00	0.348	0.204		891	22222222
15	1099.3	4.369	4.282	27.299	36.385	45.066	34.425	34.418	4.16	46.88	2.34	33.80	0.00	0.156	0.069		1087	22222222
14	1300.1	3.662	3.564	27.444	36.565	45.280	34.515	34.509	3.60	70.87	2.51	36.10	0.00	0.010	0.000		1286	22222222
13	1498.8	3.195	3.085	27.548	36.693	45.430	34.587	34.583	3.53	81.75	2.50	36.30	0.00	0.009	0.000		1481	22222222
12	1699.9	2.894	2.894	27.630	36.791	45.543	34.654		3.58	91.02	2.48	35.60	0.00				1680	25222225
11	1899.4	2.644	2.506	27.684	36.858	45.623	34.693	34.691	3.67	98.27	2.47	34.90	0.00				1876	22222225
10	2198.5	2.213	2.055	27.746	36.945	45.732	34.724	34.724	4.25	92.43	2.27	32.70	0.00				2170	22222225
9	2501.4	1.937	1.758	27.783	36.998	45.801	34.741	34.742	4.48	94.45	2.21	31.80	0.00	0.001	0.000		2467	22222222
8	2801.0	1.659	1.457	27.801	37.033	45.852	34.736	34.736	4.49	107.33	2.27	32.50	0.00				2761	22222225
7	3004.3	1.529	1.311	27.810	37.050	45.876	34.734	34.733	4.50	112.15	2.28	32.80	0.00				2960	22222225
6	3202.6	1.440	1.204	27.815	37.060	45.892	34.730	34.730	4.54	114.36	2.27	32.80	0.00				3154	22222225
5	3406.2	1.392	1.300	27.818	37.067	45.903	34.728		4.56	115.57	2.25	32.70	0.00				3353	25222225
4	3606.0	1.377	1.102	27.818	37.070	45.907	34.726	34.725	4.57	117.58	2.29	32.80	0.00				3548	22222225
3	3806.1	1.377	1.082	27.819	37.072	45.910	34.725	34.724	4.54	119.19	2.31	33.00	0.00				3743	22222225
2	4006.8	1.384	1.067	27.819	37.073	45.912	34.724	34.723	4.53	119.59	2.30	32.80	0.00				3938	22222225
1	4222.5	1.404	1.355	27.819	37.073	45.913	34.724		4.50	120.58	2.30	33.00	0.00	0.000	0.000		4148	25222222

CRUISE: CD 29 STA: 65 DATE (D/M/Y): 4-12-87 TIME: 0633 LAT: 29 0.23 S LONG: 82 0.09 E

GRAVITY= 9.7925 M/S CORIOLIS= -.70714E-04 1/S SOUND SPEED= 1501.1 M/S Depth= 4124 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	0-V CPH	DEPTH METERS
0	20.568	35.618	4.78	20.568	25.083	33.508	41.571	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.568	35.618	4.78	20.568	25.083	33.508	41.571	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	19.351	35.846	5.45	19.348	25.579	34.039	42.134	0.053	0.1	-20.47	0.295	-527.28	4.896	19.9
30	18.491	35.736	5.52	18.486	25.716	34.204	42.326	0.076	0.1	-94.08	-12.467	-986.42	6.696	29.8
40	18.073	35.692	5.58	18.066	25.787	34.289	42.424	0.099	0.2	-18.17	-1.259	-246.12	3.345	39.8
50	17.685	35.646	5.61	17.676	25.848	34.363	42.511	0.120	0.3	-96.76	-12.387	-978.97	6.671	49.7
100	15.581	35.493	5.66	15.566	26.227	34.816	43.032	0.218	1.0	-36.58	-5.626	-278.97	3.561	99.4
125	14.818	35.390	5.46	14.799	26.318	34.935	43.179	0.262	1.5	-34.94	-3.453	-350.47	3.992	124.3
150	14.145	35.345	5.28	14.123	26.428	35.071	43.338	0.304	2.1	-24.06	-1.643	-278.09	3.556	149.1
200	13.225	35.236	5.34	13.197	26.537	35.216	43.517	0.383	3.5	-12.54	-1.760	-85.57	1.972	198.8
250	12.669	35.154	5.42	12.635	26.586	35.288	43.610	0.459	5.3	-10.08	-1.352	-68.79	1.768	248.4
300	12.279	35.107	5.36	12.239	26.627	35.345	43.682	0.534	7.4	-7.87	-1.130	-47.98	1.477	298.0
350	11.820	35.036	5.50	11.775	26.661	35.398	43.753	0.608	9.8	-9.71	-1.481	-52.21	1.541	347.6
400	11.427	34.976	5.51	11.376	26.689	35.443	43.814	0.681	12.6	-7.74	-1.131	-42.39	1.388	397.2
450	11.009	34.913	5.55	10.952	26.717	35.489	43.877	0.752	15.7	-6.50	-0.885	-37.82	1.311	446.8
500	10.639	34.866	5.52	10.577	26.747	35.535	43.939	0.823	19.2	-8.23	-1.046	-50.26	1.512	496.4
600	9.881	34.769	5.43	9.811	26.804	35.626	44.061	0.962	26.9	-7.55	-0.928	-44.67	1.425	595.5
700	8.950	34.662	5.17	8.872	26.874	35.738	44.212	1.097	35.9	-12.39	-1.164	-85.33	1.970	694.6
800	7.622	34.548	4.78	7.541	26.987	35.912	44.444	1.223	45.5	-13.16	-1.039	-91.25	2.037	793.6
900	6.151	34.447	4.62	6.069	27.107	36.103	44.701	1.337	55.4	-16.25	-0.971	-115.41	2.291	892.5
1000	5.004	34.393	4.53	4.920	27.203	36.257	44.908	1.439	65.2	-9.06	-0.803	-86.11	1.978	991.4
1200	3.822	34.473	3.84	3.732	27.394	36.507	45.215	1.612	84.6	-3.47	0.470	-57.24	1.613	1189.0
1400	3.325	34.551	3.62	3.222	27.506	36.645	45.376	1.757	103.8	-2.23	0.343	-38.85	1.329	1386.4
1600	2.968	34.623	3.62	2.852	27.598	36.755	45.503	1.884	123.2	-1.46	0.333	-31.44	1.196	1583.6
1800	2.743	34.678	3.66	2.612	27.663	36.832	45.592	1.998	142.9	-1.27	0.235	-24.62	1.058	1780.6
2000	2.483	34.707	3.78	2.339	27.709	36.893	45.666	2.101	162.9	-1.33	0.087	-17.22	0.885	1977.4
2200	2.227	34.719	3.95	2.069	27.741	36.939	45.726	2.198	183.6	-1.29	0.051	-15.18	0.831	2174.0
2400	2.024	34.720	4.15	1.852	27.765	36.975	45.773	2.289	205.0	-0.98	0.038	-11.70	0.729	2370.4
2600	1.858	34.733	4.29	1.671	27.784	37.003	45.810	2.376	227.1	-0.85	0.014	-9.28	0.650	2566.6
2800	1.718	34.734	4.37	1.515	27.796	37.024	45.840	2.460	250.2	-0.83	0.003	-8.60	0.625	2762.7
3000	1.556	34.733	4.45	1.337	27.807	37.046	45.871	2.541	274.2	-0.86	-0.009	-8.59	0.625	2958.6
3200	1.444	34.730	4.49	1.209	27.814	37.060	45.891	2.619	299.1	-0.60	-0.013	-5.74	0.511	3154.3
3400	1.306	34.728	4.55	1.132	27.818	37.068	45.904	2.697	325.2	-0.30	-0.019	-2.33	0.325	3349.8
3600	1.361	34.725	4.54	1.087	27.819	37.071	45.910	2.775	353.0	-0.12	-0.008	-0.94	0.207	3545.1
3800	1.362	34.724	4.55	1.068	27.819	37.072	45.912	2.854	382.7	-0.07	-0.008	-0.39	0.133	3740.3
4000	1.371	34.722	4.55	1.055	27.819	37.073	45.913	2.934	414.6	-0.04	0.000	-0.41	0.137	3935.3
4173	1.302	34.722	4.56	1.048	27.819	37.074	45.914	3.004	444.0	-0.05	-0.001	-0.41	0.000	4103.8

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	17.0	19.485	19.482	25.539	33.995	42.086	35.839	35.917	5.56	1.14	0.21	0.10	0.00	2.095			16	222222225
23	103.3	16.106	16.089	26.097	34.668	42.867	35.479	35.593	5.66	1.15	0.27	0.20	0.00	2.276			102	222222225
22	202.8	13.514	13.485	26.471	35.139	43.430	35.227	35.283	5.32	2.17	0.61	7.00	0.00	2.368			201	222222225
21	301.8	12.269	12.229	26.628	35.346	43.684	35.106	35.102	5.43	2.98	0.76	9.60	0.00	2.226			299	222222225
20	401.9	11.391	11.340	26.695	35.451	43.823	34.976	34.971	5.51	3.61	0.89	11.70	0.00	2.329			398	222222225
19	500.5	10.600	10.539	26.753	35.543	43.948	34.865	34.863	5.51	4.43	1.01	13.60	0.00	2.029			496	222222225
18	700.7	8.829	8.752	26.892	35.761	44.240	34.660	34.651	5.05	8.20	1.40	20.00	0.00	1.075			694	222222225
17	899.9	5.834	5.754	27.148	36.159	44.771	34.448	34.427	4.60	25.05	1.98	28.00	0.00	0.426			891	222222225
16	1000.5	4.777	4.695	27.229	36.294	44.956	34.393	34.411	4.36	37.37	2.21	31.40	0.00	0.203			990	222222225
15	1100.0	4.194	4.109	27.314	36.409	45.098	34.421	34.418	4.14	48.48	2.35	33.30	0.00	0.145			1088	222222225
14	1196.8	3.805	3.715	27.395	36.509	45.217	34.472	34.477	3.81	62.42	2.46	34.70	0.00	0.039			1184	222222225
13	1399.9	3.242	3.140	27.514	36.657	45.392	34.551	34.562	3.57	78.16	2.53	35.70	0.00	0.020			1384	222222225
12	1599.5	2.934	2.819	27.600	36.759	45.509	34.622	34.628	3.59	87.46	2.51	35.30	0.00				1581	222222255
11	1798.7	2.688	2.559	27.667	36.839	45.602	34.678	34.688	3.67	95.94	2.46	34.80	0.00				1777	222222255
10	1999.7	2.431	2.288	27.714	36.900	45.675	34.707	34.708	3.79	101.98	2.44	34.40	0.00	0.008			1974	222222225
9	2199.9	2.174	2.017	27.745	36.946	45.736	34.719	34.724	4.04	103.00	2.39	33.40	0.00				2171	222222255
8	2500.3	1.915	1.735	27.777	36.993	45.797	34.731	34.732	4.28	104.21	2.33	32.90	0.00	0.006			2466	222222225
7	2801.7	1.698	1.495	27.797	37.027	45.843	34.734	34.733	4.43	108.25	2.28	32.70	0.00				2761	222222255
6	3102.1	1.488	1.261	27.812	37.055	45.884	34.732	34.735	4.54	111.48	2.27	32.40	0.00	0.006			3055	222222225
5	3404.3	1.377	1.123	27.819	37.069	45.905	34.728	34.727	4.57	116.52	2.29	32.90	0.00	0.010			3351	222222225
4	3704.6	1.356	1.072	27.820	37.073	45.912	34.725	34.725	4.55	119.35	2.33	33.30	0.00				3644	222222255
3	4008.9	1.372	1.055	27.819	37.074	45.914	34.723	34.722	4.52	120.76	2.33	33.30	0.00	0.005			3940	222222225
2	4008.1	1.372	1.055	27.819	37.074	45.914	34.723	34.725	4.53	120.56	2.32	33.30	0.00	0.003			3940	222222225
1	4173.2	1.302	1.336	27.819	37.074	45.914	34.722		4.53	120.96	2.33	33.30	0.00	0.001			4100	252222225

CRUISE: CD 29 STA: 66 DATE (D/M/Y): 4-12-87 TIME: 1816 LAT: 29 9.41 S LONG: 83 29.55 E

GRAVITY= 9.7926 M/S CORIOLIS= -.71054E-04 1/S SOUND SPEED= 1503.4 M/S Depth= 4368 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	21.304	35.647	5.48	21.304	24.905	33.308	41.350	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.304	35.647	5.48	21.304	24.905	33.308	41.350	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	21.285	35.726	5.26	21.201	24.993	33.398	41.443	0.061	0.1	-7.77	1.985	-253.73	3.388	19.9
30	21.177	35.743	5.41	21.171	25.014	33.420	41.465	0.090	0.1	-9.14	1.427	-250.24	3.365	29.9
40	20.926	35.764	5.42	20.918	25.099	33.513	41.564	0.119	0.2	-61.73	6.607	-1518.45	8.289	39.8
50	20.255	35.867	5.55	20.245	25.359	33.791	41.861	0.147	0.4	-51.66	3.445	-1143.38	7.192	49.8
100	18.136	35.813	5.59	18.118	25.866	34.365	42.498	0.266	1.3	-32.86	-1.143	-513.37	4.819	99.5
125	17.582	35.792	5.53	17.561	25.988	34.505	42.655	0.318	1.9	-22.45	-2.708	-219.06	3.148	124.3
150	16.490	35.658	5.62	16.466	26.147	34.702	42.888	0.368	2.6	-51.65	-6.206	-536.83	4.928	149.2
200	14.730	35.464	5.27	14.700	26.396	35.016	43.262	0.457	4.1	-29.49	-3.639	-256.39	3.406	198.8
250	13.391	35.274	5.30	13.356	26.534	35.206	43.501	0.537	6.0	-18.29	-2.735	-119.68	2.327	248.5
300	12.668	35.161	5.38	12.627	26.593	35.295	43.617	0.614	8.2	-11.97	-1.772	-74.17	1.832	298.1
350	12.198	35.092	5.39	12.152	26.632	35.354	43.694	0.689	10.6	-8.30	-1.147	-53.44	1.555	347.7
400	11.825	35.045	5.38	11.773	26.668	35.405	43.760	0.763	13.5	-8.27	-1.068	-55.62	1.566	397.3
450	11.480	34.984	5.41	11.343	26.701	35.456	43.829	0.836	16.6	-8.90	-1.214	-54.16	1.565	446.9
500	10.947	34.922	5.42	10.884	26.736	35.511	43.902	0.908	20.1	-10.00	-1.327	-60.20	1.651	496.5
600	10.069	34.802	5.47	9.998	26.798	35.612	44.039	1.048	27.9	-7.18	-0.943	-40.15	1.348	595.6
700	9.307	34.709	5.25	9.228	26.854	35.701	44.160	1.184	37.0	-9.74	-1.078	-61.18	1.664	694.7
800	8.155	34.583	4.91	8.071	26.936	35.837	44.345	1.314	46.9	-13.79	-1.262	-91.31	2.032	793.7
900	6.684	34.477	4.64	6.598	27.062	36.033	44.606	1.433	57.3	-16.05	-0.954	-119.56	2.326	892.6
1000	5.185	34.408	4.45	5.100	27.194	36.239	44.882	1.539	67.4	-11.19	-0.302	-93.89	2.061	991.5
1200	3.902	34.455	3.93	3.811	27.372	36.481	45.185	1.717	87.4	-3.92	0.476	-62.25	1.678	1189.1
1400	3.391	34.546	3.61	3.287	27.496	36.631	45.359	1.866	107.1	-2.29	0.392	-42.29	1.383	1386.5
1600	3.027	34.625	3.57	2.910	27.594	36.748	45.494	1.995	126.8	-1.29	0.356	-31.35	1.191	1583.7
1800	2.767	34.673	3.65	2.636	27.657	36.825	45.584	2.110	146.7	-0.83	0.269	-22.51	1.009	1780.7
2000	2.542	34.705	3.74	2.397	27.702	36.883	45.653	2.216	167.2	-1.57	0.080	-19.34	0.935	1977.5
2200	2.259	34.716	4.01	2.101	27.736	36.932	45.718	2.314	188.2	-1.35	0.055	-16.09	0.853	2174.1
2400	2.041	34.726	4.15	1.869	27.762	36.971	45.768	2.405	209.7	-1.09	0.038	-12.74	0.759	2370.5
2600	1.874	34.732	4.29	1.687	27.782	37.000	45.807	2.492	231.9	-0.84	0.018	-9.36	0.651	2566.0
2800	1.723	34.734	4.38	1.520	27.795	37.023	45.838	2.577	255.0	-0.79	-0.002	-8.00	0.601	2762.8
3000	1.598	34.731	4.43	1.379	27.803	37.039	45.862	2.658	279.2	-0.70	-0.019	-6.32	0.535	2958.7
3200	1.495	34.730	4.48	1.259	27.811	37.053	45.883	2.738	304.6	-0.54	-0.008	-5.39	0.494	3154.4
3400	1.421	34.727	4.51	1.167	27.815	37.063	45.897	2.818	331.2	-0.37	-0.014	-3.36	0.398	3349.9
3600	1.382	34.724	4.52	1.109	27.816	37.068	45.905	2.896	359.4	-0.24	-0.013	-2.03	0.303	3545.2
3800	1.367	34.722	4.52	1.073	27.817	37.070	45.909	2.976	389.4	-0.16	-0.008	-1.44	0.255	3740.4
4000	1.366	34.721	4.54	1.051	27.818	37.073	45.913	3.056	421.4	-0.08	-0.002	-0.91	0.203	3935.4
4200	1.375	34.721	4.56	1.037	27.818	37.074	45.915	3.138	455.5	-0.05	-0.001	-0.56	0.160	4130.0
4400	1.394	34.720	4.59	1.033	27.818	37.074	45.915	3.221	492.0	-0.02	-0.001	-0.56	0.080	4324.9
4447	1.398	34.721	4.55	1.032	27.819	37.075	45.916	3.241	500.9	-0.03	-0.002	-0.56	0.000	4370.6

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	15.9	21.150	21.147	25.000	33.407	41.453	35.716	35.771	5.26	-99.00	0.19			2.041		15	222225525
23	151.8	16.143	16.119	26.223	34.791	42.987	35.652	35.618	5.42	-99.00	0.33	0.70	0.00	2.155		150	222227225
22	251.8	13.497	13.482	26.510	35.178	43.469	35.271	35.290	5.28	2.61	0.68	7.30	0.00	2.083		249	222222225
21	350.3	12.356	12.309	26.601	35.316	43.651	35.091	35.113	5.38	3.46	0.82	9.80	0.00	2.142		347	222222225
20	452.1	11.420	11.363	26.696	35.450	43.822	34.982	34.984	5.37	3.79	0.92	12.00	0.00			448	222222255
19	550.2	10.587	10.519	26.747	35.538	43.943	34.852	34.869	5.40	4.12	1.04	13.90	0.00	1.700		545	222222225
18	750.5	8.790	8.708	26.892	35.763	44.244	34.651	34.655	5.06	8.35	1.42	20.20	0.00	0.872		743	222222225
17	947.8	5.874	5.789	27.133	36.143	44.754	34.435	34.437	4.54	26.32	2.03	29.10	0.00	0.283		938	222222225
16	1049.3	4.780	4.694	27.237	36.302	44.964	34.403	34.401	4.39	38.04	2.23	31.70	0.00	0.184		1038	222222225
15	1148.6	4.069	3.980	27.337	36.430	45.134	34.433	34.428	4.07	52.80	2.40	33.90	0.00	0.111		1136	222222225
14	1348.4	3.486	3.386	27.470	36.600	45.323	34.525	34.527	3.60	73.69	2.54	35.40	0.00	0.012		1333	222222225
13	1549.4	3.097	2.984	27.570	36.721	45.463	34.604	34.601	3.57	85.07	2.53	35.40	0.00			1531	222222255
12	1744.7	2.816	2.690	27.641	36.806	45.562	34.659	34.654	3.61	91.72	2.47	34.60	0.00			1724	222222255
11	1949.4	2.606	2.465	27.693	36.870	45.637	34.700	34.700	3.67	101.07	2.46	34.50	0.00			1925	222222255
10	2150.7	2.317	2.162	27.729	36.922	45.704	34.713	34.715	3.95	102.45	2.42	34.10	0.00			2123	222222255
9	2350.9	2.084	2.086	27.758	36.964	45.759	34.725		4.13	103.82	2.36	33.30	0.00			2319	252222255
8	2551.1	1.902	1.719	27.778	36.995	45.800	34.731	34.729	4.30	105.20	2.32	32.70	0.00			2516	222222255
7	2752.3	1.767	1.567	27.792	37.017	45.830	34.734	34.732	4.39	107.09	2.27	32.60	0.00	0.005		2713	222222225
6	3002.6	1.608	1.388	27.803	37.039	45.861	34.732	34.730	4.49	111.19	2.29	32.70	0.00			2958	222222255
5	3303.5	1.461	1.215	27.813	37.058	45.890	34.729	34.731	4.53	115.80	2.29	32.80	0.00			3252	222222255
4	3605.1	1.383	1.109	27.816	37.068	45.905	34.724	34.724	4.52	120.58	2.32	33.30	0.00			3547	222222255
3	3905.4	1.365	1.059	27.817	37.071	45.911	34.721	34.722	4.50	124.01	2.34	33.40	0.00			3840	222222255
2	4206.7	1.376	1.037	27.819	37.074	45.915	34.721	34.722	4.53	123.17	2.31	33.30	0.00			4133	222222255
1	4451.4	1.398	1.032	27.819	37.075	45.916	34.721	34.719	4.50	123.37	2.33	33.30	0.00	0.005		4371	222222225

CRUISE: CD 29 STA: 67 DATE {D/M/Y}: 5-12-87 TIME: 0500 LAT: 29 19.23 S LONG: 84 59.44 E

GRAVITY= 9.7927 M/S CORIOLIS= -.71418E-04 1/S SOUND SPEED= 1500.5 M/S Depth= 3875 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	21.354	36.046	5.19	21.354	25.195	33.592	41.628	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.354	36.046	5.19	21.354	25.195	33.592	41.628	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	19.962	35.926	5.34	19.958	25.481	33.920	41.997	0.054	0.1	-41.73	0.529	-801.12	6.005	19.9
30	19.600	35.930	5.39	19.595	25.579	34.030	42.117	0.078	0.1	-29.09	-0.286	-517.68	4.827	29.8
40	19.316	35.910	5.38	19.309	25.638	34.098	42.194	0.102	0.2	-29.19	-2.891	-375.38	4.111	39.8
50	18.889	35.864	5.46	18.880	25.713	34.188	42.296	0.126	0.3	-67.63	-6.508	-860.44	6.223	49.7
100	16.868	35.698	5.55	16.851	26.087	34.629	42.802	0.230	1.1	-35.84	-4.546	-354.81	3.996	99.4
125	16.070	35.585	5.53	16.050	26.187	34.758	42.958	0.278	1.6	-18.47	-1.823	-190.24	2.926	124.3
150	15.391	35.524	5.34	15.368	26.295	34.891	43.114	0.323	2.3	-38.38	-4.426	-360.53	4.308	149.1
200	13.901	35.350	5.26	13.872	26.485	35.138	43.413	0.406	3.8	-20.70	-3.139	-139.45	2.505	198.8
250	13.012	35.212	5.24	12.977	26.562	35.250	43.559	0.485	5.6	-13.34	-1.954	-86.34	1.971	248.4
300	12.419	35.117	5.40	12.379	26.608	35.320	43.652	0.561	7.7	-12.50	-1.999	-67.08	1.738	298.1
350	11.949	35.046	5.39	11.903	26.644	35.376	43.727	0.635	10.2	-6.26	-0.872	-39.07	1.326	347.7
400	11.636	35.007	5.44	11.584	26.674	35.419	43.782	0.709	13.0	-6.91	-0.710	-55.59	1.582	397.3
450	11.249	34.960	5.41	11.192	26.710	35.472	43.850	0.781	16.1	-9.51	-1.220	-61.38	1.662	446.9
500	10.770	34.893	5.41	10.708	26.745	35.528	43.926	0.852	19.6	-9.97	-1.398	-54.82	1.571	496.4
600	10.031	34.794	5.45	9.960	26.798	35.614	44.042	0.991	27.4	-7.00	-0.908	-39.52	1.334	595.6
700	9.106	34.673	5.28	9.027	26.858	35.715	44.183	1.127	36.3	-10.16	-1.148	-61.87	1.669	694.6
800	8.036	34.577	4.87	7.952	26.949	35.855	44.369	1.256	46.2	-13.97	-1.085	-102.37	2.147	793.6
900	6.034	34.477	4.61	6.548	27.068	36.041	44.617	1.374	56.5	-14.24	-0.880	-104.48	2.169	892.6
1000	5.106	34.411	4.38	5.022	27.206	36.254	44.901	1.480	66.7	-12.71	-0.228	-113.11	2.256	991.5
1200	3.875	34.475	3.80	3.784	27.390	36.501	45.205	1.654	86.1	-3.53	0.440	-56.86	1.600	1189.1
1400	3.354	34.549	3.58	3.251	27.502	36.639	45.369	1.801	105.6	-2.13	0.319	-37.07	1.292	1386.5
1600	2.983	34.608	3.62	2.866	27.584	36.740	45.489	1.931	125.4	-1.93	0.327	-35.82	1.270	1583.6
1800	2.775	34.678	3.00	2.644	27.660	36.828	45.586	2.046	145.3	-1.46	0.193	-24.31	1.046	1780.6
2000	2.484	34.703	3.77	2.340	27.706	36.889	45.662	2.150	165.5	-1.22	0.129	-18.67	0.917	1977.4
2200	2.227	34.718	3.94	2.069	27.740	36.938	45.725	2.247	186.3	-1.26	0.052	-15.07	0.824	2174.0
2400	2.025	34.726	4.11	1.853	27.764	36.974	45.772	2.338	207.7	-0.89	0.028	-10.38	0.684	2370.5
2600	1.869	34.730	4.23	1.682	27.780	37.000	45.806	2.425	229.9	-0.99	0.020	-11.06	0.706	2566.7
2800	1.719	34.732	4.32	1.516	27.794	37.022	45.838	2.509	253.0	-0.70	0.001	-7.29	0.573	2762.7
3000	1.610	34.732	4.38	1.390	27.803	37.038	45.860	2.591	277.3	-0.70	-0.012	-6.67	0.548	2958.6
3200	1.485	34.729	4.41	1.249	27.810	37.054	45.883	2.671	302.6	-0.63	-0.016	-6.00	0.520	3154.3
3400	1.409	34.726	4.46	1.155	27.815	37.063	45.898	2.750	329.1	-0.37	-0.012	-3.43	0.393	3349.8
3600	1.367	34.723	4.47	1.093	27.817	37.069	45.907	2.829	357.2	-0.27	-0.014	-2.29	0.321	3545.2
3800	1.344	34.721	4.48	1.050	27.818	37.073	45.913	2.908	387.0	-0.11	-0.007	-0.90	0.202	3740.3
3993	1.357	34.721	4.49	1.043	27.818	37.073	45.914	2.985	417.7	-0.02	0.000	-0.90	0.000	3928.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	11.9	20.810	20.808	25.250	33.664	41.717	35.922	35.861	5.30	2.21	0.18	0.10	0.00	1.961		11	222222225
23	152.5	15.510	15.487	26.250	34.850	43.069	35.511	35.524	5.45	1.87	0.38	1.40	0.00	2.234		151	222222225
22	252.4	13.082	13.047	26.539	35.224	43.531	35.200	35.221	5.38	2.71	0.69	7.80	0.00	2.370		250	222222225
21	350.8	11.941	11.895	26.645	35.377	43.728	35.045	35.046	5.53	3.74	0.82	10.40	0.00	2.256		347	222222225
20	449.9	11.257	11.201	26.710	35.471	43.849	34.962	34.963	5.45	4.07	0.94	12.20	0.00	1.921		445	222222225
19	551.2	10.387	10.320	26.767	35.566	43.980	34.833	34.840	5.47	4.41	1.08	14.20	0.00	1.826		546	222222225
18	749.8	8.596	8.514	26.903	35.783	44.273	34.627	34.620	5.03	8.99	1.48	21.10	0.00	0.953		742	222222225
17	850.8	7.179	7.095	27.028	35.974	44.526	34.520	34.517	4.67	17.30	1.79	25.90	0.00	0.428		842	222222225
16	1000.4	5.033	4.950	27.214	36.266	44.916	34.411	34.407	4.39	36.30	2.23	31.70	0.00	0.168		990	222222225
15	1199.9	3.877	3.785	27.391	36.501	45.205	34.475	34.474	3.78	62.92	2.53	35.30	0.00	0.065		1187	222222225
14	1299.9	3.577	3.480	27.454	36.580	45.299	34.517	34.519	3.58	72.06	2.56	35.60	0.00			1285	222222225
13	1400.0	3.379	3.275	27.499	36.635	45.364	34.549	34.550	3.54	78.15	2.57	36.10	0.00			1384	222222225
12	1600.5	2.971	2.855	27.585	36.742	45.491	34.608	34.607	3.62	85.43	2.54	35.90	0.00			1582	222222225
11	1680.4	2.848	2.727	27.619	36.783	45.537	34.636	34.632	3.62	88.63	2.53	35.70	0.00			1660	222222225
10	1800.3	2.744	2.614	27.663	36.832	45.591	34.678	34.668	3.64	95.05	2.52	34.80	0.00			1778	222222225
9	1999.6	2.493	2.348	27.705	36.888	45.661	34.703	34.702	3.81	100.45	2.46	34.80	0.00			1974	222222225
8	2200.6	2.229	2.071	27.740	36.938	45.725	34.718	34.718	3.99	102.63	2.43	34.80	0.00	0.009		2172	222222225
7	2400.9	2.020	1.848	27.764	36.974	45.772	34.726	34.726	4.17	104.48	2.36	33.40	0.00			2368	222222225
6	2602.5	1.872	1.684	27.781	37.000	45.806	34.731	34.730	4.26	106.66	2.34	32.90	0.00			2566	222222225
5	2878.6	1.663	1.454	27.798	37.030	45.849	34.732	34.729	4.41	110.18	2.31	32.70	0.00			2837	222222225
4	3203.0	1.488	1.251	27.811	37.054	45.883	34.729	34.725	4.48	115.58	2.32	32.90	0.00			3154	222222225
3	3505.3	1.300	1.116	27.817	37.067	45.904	34.725	34.723	4.51	119.96	2.34	33.00	0.00			3449	222222225
2	3807.1	1.344	1.050	27.818	37.073	45.913	34.721	34.719	4.49	122.97	2.35	33.10	0.00			3744	222222225
1	3994.7	1.357	1.043	27.818	37.073	45.914	34.721	34.720	4.47	123.12	2.35	33.30	0.00	0.004		3927	222222225

CRUISE: CD 29 STA: 68 DATE (D/M/Y) 5-12-87 TIME 1315 LAT 29 27 94 S LONG 85 58 69 E

GRAVITY= 9.7928 M/S CORIOLIS= - 71740E-04 1/S SOUND SPEED= 1502.8 M/S Depth= 4470 Cor Meters

PRES	TMF	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRO-PT	GRO-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	21.048	36.023	5.18	21.048	25.261	33.667	41.713	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.048	36.023	5.18	21.048	25.261	33.668	41.713	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	19.946	35.912	5.33	19.943	25.474	33.914	41.992	0.052	0.1	-24.06	1.437	-524.39	4.848	19.9
30	19.792	35.922	5.40	19.787	25.523	33.968	42.050	0.077	0.1	-8.96	0.657	-201.11	3.002	29.8
40	19.719	35.925	5.51	19.711	25.545	33.992	42.076	0.102	0.2	-11.89	-0.801	-176.67	2.814	39.8
50	19.595	35.918	5.47	19.586	25.573	34.024	42.112	0.126	0.3	-3.01	0.232	-67.80	1.743	49.7
100	17.379	35.738	5.58	17.362	25.995	34.520	42.676	0.240	1.2	-49.77	-4.286	-623.66	5.287	99.5
125	16.351	35.635	5.52	16.331	26.160	34.721	42.911	0.289	1.7	-32.68	-3.536	-347.60	3.947	124.3
150	15.462	35.547	5.30	15.439	26.297	34.890	43.110	0.335	2.4	-27.22	-2.396	-314.10	3.752	149.1
200	14.348	35.429	5.15	14.318	26.452	35.087	43.346	0.419	3.9	-17.87	-2.384	-144.48	2.544	198.0
250	13.416	35.296	5.12	13.380	26.546	35.217	43.511	0.499	5.7	-23.93	-3.529	-160.38	2.681	248.4
300	12.355	35.136	5.22	12.315	26.635	35.350	43.684	0.575	7.8	-17.39	-2.611	-102.74	2.146	298.1
350	11.608	35.026	5.24	11.563	26.693	35.439	43.802	0.647	10.2	-11.20	-1.659	-62.26	1.678	347.7
400	11.041	34.941	5.37	10.991	26.731	35.502	43.888	0.718	13.0	-14.05	-2.045	-74.94	1.833	397.3
450	10.432	34.852	5.42	10.378	26.772	35.569	43.980	0.787	16.0	-8.99	-1.246	-47.93	1.466	446.9
500	9.951	34.787	5.40	9.893	26.805	35.623	44.054	0.855	19.3	-8.84	-1.187	-46.97	1.451	496.4
600	9.086	34.678	5.24	9.019	26.863	35.721	44.189	0.988	26.7	-10.35	-1.125	-63.61	1.688	595.5
700	7.919	34.571	4.84	7.847	26.960	35.872	44.390	1.115	35.1	-12.94	-0.992	-93.72	2.049	694.6
800	6.670	34.485	4.53	6.594	27.069	36.039	44.613	1.231	44.0	-14.53	-0.858	-106.95	2.189	793.6
900	5.531	34.435	4.30	5.453	27.174	36.200	44.827	1.336	53.0	-9.45	-0.210	-80.91	1.904	892.5
1000	4.400	34.415	4.15	4.321	27.287	36.371	45.051	1.430	62.2	-7.25	0.092	-73.50	1.815	991.4
1200	3.708	34.498	3.70	3.618	27.425	36.544	45.256	1.593	80.5	-3.21	0.458	-54.53	1.563	1189.0
1400	3.209	34.579	3.55	3.107	27.539	36.683	45.420	1.732	98.8	-1.64	0.258	-29.34	1.147	1386.4
1600	3.013	34.623	3.55	2.896	27.594	36.749	45.495	1.858	118.0	-1.48	0.359	-33.37	1.223	1563.6
1800	2.651	34.678	3.69	2.522	27.671	36.844	45.609	1.970	137.4	-1.30	0.186	-22.41	1.002	1780.6
2000	2.436	34.704	3.80	2.292	27.711	36.897	45.673	2.072	157.1	-1.11	0.079	-14.82	0.815	1977.3
2200	2.210	34.718	3.96	2.052	27.742	36.941	45.729	2.167	177.7	-1.26	0.056	-15.47	0.833	2174.0
2400	2.017	34.726	4.08	1.845	27.764	36.974	45.773	2.258	198.9	-1.04	0.028	-11.87	0.729	2370.4
2600	1.831	34.730	4.21	1.644	27.783	37.004	45.813	2.345	221.0	-0.93	0.013	-10.08	0.672	2566.6
2800	1.687	34.730	4.27	1.485	27.795	37.025	45.842	2.428	243.9	-0.89	-0.011	-8.57	0.620	2762.7
3000	1.529	34.728	4.33	1.311	27.805	37.045	45.872	2.509	267.9	-0.82	-0.012	-8.01	0.599	2958.5
3200	1.412	34.726	4.39	1.178	27.813	37.060	45.894	2.587	292.7	-0.53	-0.012	-5.12	0.479	3154.2
3400	1.362	34.723	4.42	1.110	27.816	37.067	45.904	2.665	318.8	-0.27	-0.008	-2.56	0.339	3349.7
3600	1.335	34.721	4.44	1.062	27.817	37.071	45.911	2.743	346.6	-0.28	-0.011	-2.63	0.343	3545.1
3800	1.282	34.719	4.49	0.990	27.820	37.079	45.922	2.821	376.0	-0.29	-0.009	-2.90	0.361	3740.3
4000	1.263	34.718	4.53	0.951	27.822	37.082	45.928	2.899	407.0	-0.15	-0.004	-1.67	0.274	3935.3
4200	1.266	34.717	4.55	0.932	27.822	37.084	45.930	2.977	439.9	-0.07	-0.003	-0.72	0.179	4130.1
4400	1.272	34.717	4.58	0.915	27.823	37.086	45.933	3.057	475.0	-0.11	-0.003	-1.23	0.234	4324.7
4527	1.271	34.716	4.60	0.900	27.824	37.087	45.935	3.109	498.3	-0.13	-0.003	-1.23	0.000	4448.3

BOTL	PRES	CTD	TMF	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68		KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	14.4	19.881	19.879	25.483	33.926	42.005	35.902	35.937	5.34	1.89	0.13	0.10	0.00				14	222222255
23	103.5	17.242	17.225	26.022	34.551	42.712	35.730	35.739	5.50	1.56	0.20	0.10	0.00				102	222222255
22	201.9	14.132	14.103	26.496	35.139	43.406	35.427	35.400	5.32	2.40	0.54	5.90	0.00				200	222222255
21	302.0	12.163	12.123	26.669	35.391	43.732	35.133	35.111	5.28	3.59	0.75	9.90	0.00				299	222222255
20	504.0	9.818	9.759	26.825	35.649	44.085	34.784	34.773	5.41	5.10	1.09	15.50	0.00				499	222222255
19	650.5	8.405	8.335	26.925	35.813	44.310	34.620	34.614	4.93	10.16	1.45	21.40	0.00				644	222222255
18	799.1	6.405	6.331	27.103	36.086	44.672	34.485	34.467	4.50	23.97	1.89	28.00	0.00				791	222222255
17	1050.1	4.208	4.126	27.320	36.414	45.103	34.431	34.426	4.05	51.08	2.36	33.60	0.00				1039	222222255
16	1200.1	3.652	3.563	27.431	36.552	45.268	34.498	34.510	3.62	70.45	2.51	35.50	0.00				1187	222222255
15	1400.5	3.160	3.059	27.544	36.690	45.429	34.579	34.583	3.54	82.74	2.52	35.80	0.00	0.015	0.000		1385	222222222
14	1599.7	2.999	2.882	27.595	36.750	45.497	34.623	34.631	3.50	89.13	2.51	35.50	0.00				1581	222222255
13	1801.6	2.655	2.525	27.671	36.845	45.609	34.679	34.677	3.67	95.69	2.43	34.80	0.00				1780	222222255
12	2002.8	2.419	2.276	27.713	36.900	45.676	34.705	34.704	3.79	100.92	2.40	34.40	0.00				1977	222222255
11	2203.1	2.187	2.030	27.744	36.944	45.733	34.719	34.716	3.99	103.60	2.35	34.20	0.00	0.008	0.000		2174	222222222
10	2402.7	2.003	1.831	27.765	36.976	45.775	34.726	34.727	4.12	106.64	2.33	33.60	0.00				2370	222222255
9	2602.4	1.845	1.658	27.782	37.002	45.810	34.730	34.737	4.25	108.14	2.31	33.30	0.00				2566	222222255
8	2802.3	1.684	1.482	27.795	37.025	45.842	34.730	34.731	4.32	112.34	2.30	33.30	0.00				2762	222222255
7	3004.9	1.502	1.285	27.807	37.049	45.876	34.728	34.728	4.39	117.56	2.29	33.40	0.00				2960	222222255
6	3305.2	1.385	1.141	27.814	37.064	45.899	34.724	34.725	4.45	121.09	2.30	33.50	0.00				3254	222222255
5	3606.7	1.327	1.054	27.818	37.073	45.913	34.722	34.719	4.43	123.95	2.30	33.80	0.00	0.006	0.000		3548	222222222
4	3804.9	1.287	0.994	27.821	37.079	45.922	34.720	34.722	4.48	123.94	2.30	33.40	0.00				3742	222222255
3	4007.7	1.262	0.949	27.822	37.083	45.928	34.718	34.714	4.50	125.11		33.60	0.00	0.003	0.000		3939	222222222
2	4312.8	1.271	0.924	27.823	37.085	45.932	34.717	34.720	4.53	124.94	2.30	33.50	0.00				4236	222222255
1	4532.9	1.270	0.898	27.824	37.087	45.936	34.716	34.714	4.53	125.10	2.29	33.60	0.00	0.003	0.000		4450	222222222

CRUISE: CD 29 STA: 69 DATE (D/M/Y): 5-12-87 TIME: 2205 LAT: 29 32.16 S LONG: 86 55.20 E

GRAVITY= 9.7929 M/S CORIOLIS= -.71896E-04 1/S SOUND SPEED= 1498.8 M/S Depth= 3562 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	21.276	35.911	5.11	21.276	25.113	33.514	41.555	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.276	35.911	5.11	21.276	25.113	33.514	41.555	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	20.678	35.890	5.35	20.674	25.261	33.680	41.738	0.056	0.1	-11.50	1.345	-291.37	3.610	19.9
30	20.577	35.895	5.37	20.572	25.293	33.715	41.775	0.083	0.1	-9.98	0.692	-226.75	3.184	29.9
40	20.221	35.915	5.41	20.214	25.404	33.837	41.906	0.109	0.2	-47.15	1.571	-971.56	6.591	39.8
50	19.869	35.912	5.54	19.860	25.496	33.939	42.019	0.134	0.3	-47.02	-3.203	-701.40	5.600	49.7
100	17.909	35.824	5.52	17.892	25.931	34.438	42.576	0.249	1.2	-30.71	-2.302	-416.14	4.314	99.5
125	17.412	35.793	5.39	17.391	26.030	34.553	42.708	0.300	1.8	-20.30	-1.936	-245.01	3.310	124.3
150	16.729	35.716	5.26	16.705	26.135	34.682	42.859	0.349	2.5	-34.86	-4.447	-353.80	3.977	149.2
200	14.978	35.509	5.16	14.947	26.377	34.988	43.225	0.440	4.1	-29.66	-3.705	-266.89	3.455	198.8
250	13.656	35.328	5.24	13.620	26.521	35.183	43.468	0.522	6.0	-22.23	-3.174	-161.17	2.685	248.5
300	12.881	35.211	5.28	12.840	26.589	35.282	43.596	0.599	8.1	-16.40	-2.567	-96.82	2.081	298.1
350	12.136	35.093	5.27	12.090	26.645	35.369	43.712	0.674	10.6	-13.00	-2.002	-72.95	1.806	347.7
400	11.553	35.004	5.41	11.502	26.687	35.435	43.801	0.747	13.4	-10.57	-1.574	-58.36	1.615	397.3
450	11.086	34.937	5.49	11.030	26.721	35.490	43.875	0.819	16.5	-7.26	-0.987	-43.39	1.393	446.9
500	10.637	34.874	5.42	10.576	26.754	35.542	43.945	0.890	20.0	-8.06	-1.104	-45.66	1.429	496.5
600	9.787	34.757	5.41	9.717	26.811	35.637	44.075	1.028	27.7	-8.17	-1.075	-45.08	1.420	595.6
700	9.070	34.668	5.30	8.992	26.860	35.719	44.188	1.163	36.6	-7.26	-0.775	-46.70	1.445	694.7
800	8.077	34.577	4.93	7.993	26.943	35.848	44.360	1.293	46.6	-14.25	-1.137	-103.64	2.153	793.7
900	6.455	34.463	4.62	6.371	27.080	36.062	44.646	1.411	56.8	-17.40	-1.007	-130.54	2.416	892.6
1000	4.964	34.399	4.41	4.881	27.213	36.268	44.921	1.514	66.8	-11.44	-0.155	-103.74	2.154	991.5
1200	3.959	34.485	3.71	3.867	27.390	36.496	45.196	1.687	86.1	-4.31	0.292	-56.31	1.587	1189.1
1400	3.398	34.558	3.53	3.294	27.505	36.640	45.367	1.833	105.4	-1.80	0.340	-35.53	1.260	1386.5
1600	3.015	34.612	3.58	2.898	27.585	36.740	45.486	1.962	125.1	-2.07	0.214	-31.04	1.178	1583.7
1800	2.754	34.665	3.65	2.623	27.651	36.820	45.579	2.077	145.2	-1.18	0.208	-22.58	1.005	1780.7
2000	2.488	34.701	3.77	2.344	27.704	36.887	45.660	2.183	165.6	-1.50	0.122	-21.15	0.972	1977.5
2200	2.209	34.718	3.90	2.052	27.742	36.941	45.729	2.280	186.3	-1.22	0.047	-14.44	0.803	2174.1
2400	2.014	34.724	4.04	1.842	27.763	36.974	45.772	2.370	207.6	-1.00	0.026	-11.35	0.713	2370.5
2600	1.847	34.727	4.14	1.660	27.779	37.000	45.808	2.457	229.8	-0.97	0.005	-10.09	0.672	2566.7
2800	1.701	34.730	4.27	1.499	27.794	37.023	45.840	2.541	252.9	-0.60	0.004	-6.44	0.36	2762.8
3000	1.606	34.729	4.31	1.387	27.801	37.037	45.859	2.623	277.1	-0.60	-0.009	-5.83	0.511	2958.6
3200	1.501	34.726	4.37	1.264	27.807	37.050	45.879	2.704	302.7	-0.62	-0.011	-6.22	0.527	3154.3
3400	1.398	34.724	4.42	1.144	27.814	37.063	45.898	2.783	329.4	-0.54	-0.016	-5.14	0.479	3349.9
3587	1.344	34.722	4.44	1.072	27.817	37.070	45.909	2.857	355.5	-0.31	-0.010	-5.14	0.000	3532.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	2.6	21.599	21.599	24.119	32.525	40.569	34.721	36.529	5.16	1.83	0.19	0.00	0.00	2.037	1.118	2	22222222
23	102.5	18.029	18.011	25.894	34.396	42.532	35.814	35.854	5.36	1.32	0.25	0.00	0.00	1.999	1.124	101	22222222
22	202.2	14.806	14.776	26.411	35.029	43.271	35.505	35.493	5.12	1.99	0.53	3.80	0.00	2.138	1.170	200	22222222
21	303.9	12.673	12.632	26.627	35.329	43.650	35.207	35.177	5.34	2.50	0.74	0.00	0.00	2.184	1.150	301	22222222
20	400.4	11.459	11.408	26.703	35.455	43.825	35.002	34.989	5.46	3.52	0.91	10.70	0.00	2.066	1.059	396	22222222
19	501.6	10.581	10.519	26.763	35.554	43.959	34.873	34.866	5.48	3.85	1.06	12.70	0.00	1.961	1.062	497	22222222
18	601.2	9.816	9.746	26.805	35.630	44.067	34.756	34.766	5.46	4.35	1.15	14.90	0.00	1.852	0.997	595	22222222
17	701.4	9.049	8.971	26.862	35.722	44.192	34.667	34.666	5.27	6.04	1.33	17.90	0.00	1.379	0.779	694	22222222
16	799.9	7.977	7.894	26.959	35.868	44.384	34.579	34.567	4.81	12.49	1.63	22.80	0.00	0.708	0.401	792	22222222
15	901.0	6.423	6.339	27.083	36.066	44.652	34.461	34.462	4.56	22.15	1.94	27.20	0.00	0.428	0.265	892	22222222
14	998.7	4.890	4.808	27.221	36.280	44.937	34.399	34.403	4.43	35.86	2.9	30.90	0.00	0.221	0.148	988	22222222
13	1108.7	4.326	4.239	27.334	36.421	45.104	34.463	34.464	3.78	57.53	2.42	33.90	0.00	0.056	0.047	1097	22222222
12	1302.6	3.560	3.463	27.476	36.602	45.321	34.542	34.530	3.54	74.79	2.52	35.20	0.00	0.018	0.000	1288	22222222
11	1502.8	3.214	3.104	27.552	36.696	45.433	34.595	34.602	3.42	88.12	2.53	35.10	0.00			1485	22222225
10	1695.2	2.825	2.702	27.627	36.792	45.547	34.643	34.654	3.87	91.62	2.48	35.70	0.00	0.000	0.000	1675	22222222
9	1898.3	2.502	2.445	27.684	36.861	45.630	34.686	34.693	3.71	97.86	2.43	35.90	0.00			1875	22222225
8	2103.6	2.301	2.151	27.729	36.922	45.705	34.712	34.715	3.86	104.21	2.41	35.40	0.00			2077	22222225
7	2302.4	2.106	1.941	27.754	36.959	45.752	34.722	34.725	4.00	106.53	2.36	34.90	0.00	0.004	0.000	2272	22222222
6	2502.4	1.927	1.747	27.773	36.989	45.792	34.728	34.729	4.17	107.32	2.32	34.50	0.00			2468	22222225
5	2702.3	1.770	1.575	27.787	37.012	45.825	34.729	34.730	4.25	110.93	2.29	34.30	0.00	0.002	0.000	2664	22222222
4	2903.6	1.654	1.443	27.798	37.030	45.849	34.730	34.730	4.34	111.73	2.27	33.80	0.00			2861	22222225
3	3103.0	1.551	1.323	27.805	37.044	45.870	34.728	34.731	4.34	115.42	2.30	33.90	0.00			3056	22222225
2	3303.5	1.443	1.197	27.811	37.057	45.890	34.725	34.724	4.42	118.56	2.29	34.00	0.00	0.001		3252	22222225
1	3509.7	1.342	1.324	27.816	37.070	45.909	34.721		4.45	122.04	2.29	33.90	0.00	0.003	0.000	3532	25222222

CRUISE: CD 29 STA: 70 DATE (D/M/Y): 6-12-87 TIME: 0540 LAT: 29 39.75 S LONG: 87 50.08 E

GRAVITY= 9.7930 M/S CORIOLIS= -.72176E-04 1/S SOUND SPEED= 1497.8 M/S Depth= 1228 Cor M. ters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	FE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-v (m s)-1 10-12	B-V CPH	DEPTH METERS
0	21.130	35.891	4.97	21.130	25.138	33.544	41.588	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.130	35.891	4.97	21.130	25.138	33.544	41.588	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	20.506	35.877	5.48	20.502	25.298	33.722	41.785	0.056	0.1	-26.57	-0.450	-481.50	4.631	19.9
30	20.394	35.892	5.58	20.388	25.340	33.767	41.832	0.082	0.1	-5.42	1.216	-168.42	2.739	29.9
40	20.297	35.889	5.47	20.289	25.364	33.795	41.863	0.108	0.2	-11.00	-0.518	-180.22	2.833	39.8
50	19.782	35.861	5.56	19.773	25.480	33.926	42.009	0.134	0.3	-86.21	-2.648	-1463.17	8.073	49.7
100	17.758	35.802	5.62	17.741	25.951	34.463	42.607	0.247	1.2	-47.88	-4.629	-577.37	5.071	99.5
125	16.405	35.646	5.47	16.385	26.156	34.715	42.903	0.297	1.8	-49.00	-6.767	-454.44	4.499	124.3
150	15.564	35.540	5.41	15.541	26.269	34.858	43.075	0.343	2.4	-27.74	-1.984	-335.58	3.866	149.1
200	14.096	35.378	5.34	14.067	26.466	35.111	43.379	0.427	3.9	-23.66	-3.218	-184.83	2.869	198.8
250	13.178	35.239	5.39	13.143	26.550	35.231	43.534	0.506	5.7	-18.52	-2.823	-116.94	2.282	248.5
300	12.325	35.109	5.45	12.285	26.619	35.335	43.671	0.582	7.8	-18.46	-3.100	-91.12	2.015	298.1
350	11.756	35.017	5.52	11.711	26.658	35.398	43.756	0.656	10.3	-6.37	-0.886	-39.37	1.324	347.7
400	11.494	34.980	5.51	11.443	26.679	35.430	43.799	0.729	13.1	-6.03	-0.827	-37.09	1.285	397.3
450	11.280	34.949	5.43	11.223	26.696	35.457	43.834	0.801	16.2	-5.47	-0.750	-33.03	1.213	446.9
500	10.852	34.891	5.61	10.790	26.729	35.509	43.903	0.873	19.7	-7.35	-0.777	-55.75	1.576	496.5
600	10.109	34.795	5.54	10.037	26.786	35.598	44.023	1.014	27.6	-7.55	-0.985	-43.79	1.397	595.6
700	9.405	34.706	5.45	9.325	26.836	35.680	44.135	1.151	36.7	-8.10	-0.987	-47.64	1.457	694.6
800	8.403	34.605	5.04	8.318	26.916	35.806	44.303	1.284	46.9	-15.90	-1.256	-119.37	2.306	793.7
900	6.314	34.462	4.57	6.231	27.098	36.086	44.677	1.403	57.2	-15.68	-0.833	-123.91	2.349	892.6
1000	5.117	34.420	4.24	5.033	27.211	36.259	44.905	1.506	67.1	-10.66	-0.292	-90.10	2.003	991.5
1200	3.820	34.475	3.80	3.729	27.396	36.509	45.216	1.681	86.7	-3.69	0.525	-63.65	1.684	1189.1
1355	3.414	34.541	3.56	3.314	27.489	36.623	45.350	1.795	101.6	-2.73	0.421	-63.65	0.000	1342.1

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
14	14.6	20.749	20.746	25.232	33.649	41.704	35.877	35.898	5.27	2.85	0.16	0.20	0.00				14	222222255
13	103.4	17.703	17.685	25.951	34.465	42.611	35.784	35.799	5.49	2.35	0.22	0.20	0.00				102	222222255
12	203.4	14.289	14.259	26.416	35.053	43.315	35.366	35.404	5.25	2.18	0.51	5.20	0.00				201	222222255
11	302.3	12.575	12.534	26.564	35.270	43.597	35.100	35.149	5.39	3.70	0.73	9.00	0.00				299	222222255
10	399.4	11.500	11.448	26.679	35.430	43.798	34.981	34.981	5.57	3.87	0.87	11.30	0.00				395	222222255
9	501.8	10.755	10.693	26.746	35.529	43.928	34.891	34.882	5.54	4.37	0.97	13.10	0.00				497	222222255
8	600.4	9.998	9.927	26.805	35.621	44.051	34.795	34.778	5.48	5.38	1.11	15.50	0.00				594	222222255
7	698.6	9.244	9.165	26.863	35.714	44.175	34.708	34.687	5.33	6.05	1.27	18.10	0.00				692	222222255
6	798.7	8.188	8.104	26.949	35.848	44.355	34.606	34.590	4.91	11.43	1.54	22.80	0.00				791	222222255
5	899.9	6.302	6.219	27.100	36.088	44.679	34.462	34.457	4.54	23.88	1.95	28.70	0.00				891	222222255
4	997.7	5.077	4.993	27.220	36.269	44.917	34.424	34.416	4.29	36.67	2.20	32.00	0.00				987	222222255
3	1098.0	4.265	4.179	27.302	36.393	45.079	34.415	34.414	4.15	47.96	2.35	34.10	0.00				1086	222222255
2	1201.3	3.816	3.812	27.397	36.510	45.217	34.475		3.78	62.78	2.47	35.70	0.00				1188	252222255
1	1352.5	3.406	3.306	27.489	36.623	45.350	34.539	34.543	3.57	75.75	2.51	36.20	0.00				1337	222222255

CRUISE: CD 29 STA: 71 DATE (D/M/Y): 6-12-87 TIME: 1030 LAT: 29 49.81 S LONG: 88 34.84 E

GRAVITY= 9.7931 M/S CORIOLIS= - 72546E-04 1/S SOUND SPEED= 1494.6 M/S Depth= 1844 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	21.454	35.857	5.37	21.454	25.023	33.419	41.456	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.454	35.857	5.37	21.454	25.023	33.419	41.456	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	20.105	35.891	5.89	20.101	25.416	33.852	41.926	0.055	0.1	-28.83	2.863	-699.66	5.568	19.9
30	19.864	35.902	5.67	19.858	25.489	33.932	42.012	0.081	0.1	-13.63	1.050	-312.65	3.722	29.9
40	19.677	35.913	5.61	19.669	25.547	33.996	42.081	0.105	0.2	-37.90	-1.943	-600.41	5.158	39.8
50	19.224	35.891	5.55	19.215	25.648	34.112	42.210	0.129	0.3	-54.06	-1.442	-914.93	6.367	49.7
100	17.161	35.724	5.67	17.145	26.036	34.569	42.732	0.238	1.1	-42.50	-4.386	-495.54	4.686	99.5
125	16.370	35.638	5.65	16.349	26.158	34.718	42.908	0.287	1.7	-43.79	-4.886	-437.42	4.403	124.3
150	15.202	35.510	5.39	15.179	26.326	34.929	43.158	0.332	2.3	-39.15	-4.614	-375.21	4.078	149.1
200	14.003	35.378	5.34	13.974	26.485	35.133	43.405	0.414	3.8	-14.20	-1.791	-117.43	2.281	198.8
250	13.199	35.253	5.35	13.164	26.557	35.237	43.539	0.493	5.6	-19.28	-2.736	-133.47	2.432	248.4
300	12.272	35.110	5.41	12.232	26.630	35.349	43.686	0.568	7.7	-15.27	-2.323	-88.98	1.986	298.1
350	11.680	35.026	5.39	11.635	26.679	35.422	43.783	0.641	10.1	-10.58	-1.565	-60.07	1.631	347.7
400	11.266	34.965	5.46	11.215	26.709	35.470	43.848	0.713	12.9	-8.85	-1.265	-50.27	1.493	397.3
450	10.750	34.892	5.46	10.695	26.747	35.530	43.928	0.783	15.9	-8.47	-1.213	-45.56	1.421	446.9
500	10.374	34.837	5.53	10.314	26.771	35.570	43.984	0.853	19.3	-6.37	-0.855	-36.10	1.265	496.4
600	9.683	34.733	5.48	9.534	26.822	35.656	44.102	0.990	27.0	-7.19	-0.913	-48.63	1.342	595.6
700	8.920	34.652	5.26	8.843	26.871	35.736	44.212	1.123	35.8	-3.15	-0.801	-55.13	1.563	694.6
800	7.623	34.541	4.81	7.542	26.981	35.907	44.438	1.250	45.5	-14.75	-1.125	-109.80	2.206	793.6
900	6.485	34.465	4.60	6.401	27.078	36.058	44.641	1.366	55.6	-15.16	-0.873	-114.16	2.249	892.6
1000	5.060	34.404	4.42	4.977	27.205	36.256	44.905	1.470	65.6	-11.49	-0.234	-101.20	2.118	991.5
1200	3.849	34.464	3.86	3.758	27.385	36.496	45.202	1.645	85.2	-3.67	0.472	-60.82	1.642	1189.1
1400	3.264	34.553	3.59	3.162	27.514	36.655	45.389	1.792	104.6	-2.53	0.386	-45.15	1.415	1386.4
1600	2.907	34.620	3.62	2.791	27.601	36.761	45.513	1.918	123.9	-1.59	0.365	-35.26	1.250	1583.6
1800	2.667	34.671	3.65	2.538	27.664	36.837	45.600	2.030	143.3	-1.25	0.184	-35.26	0.000	1780.6
1843	2.594	34.683	3.66	2.462	27.679	36.856	45.624	2.053	147.6	-1.31	0.195	-35.26	0.000	1822.9

BOTL NO.	PRES DBAR	CTD IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
16	2.9	21.419	21.418	24.139	32.550	40.601	34.682	35.921	5.24	2.50	0.13	0.00	0.00			2	222222255
15	101.4	17.099	17.083	26.044	34.578	42.743	35.714	35.727	5.54	1.49	0.22	0.10	0.00			100	222222255
14	202.5	13.936	13.907	26.494	35.145	43.419	35.371	35.368	5.23	2.16	0.55	6.00	0.00			200	222222255
13	299.7	12.427	12.387	26.602	35.314	43.646	35.112	35.142	5.35	3.00	0.74	9.30	0.00			297	222222255
12	401.6	11.315	11.284	26.699	35.458	43.833	34.963	34.971	5.46	3.68	0.87	11.80	0.00			398	222222255
11	499.9	10.414	10.354	26.765	35.563	43.975	34.838	34.840	5.48	4.18	1.01	14.00	0.00			495	222222255
10	600.3	9.696	9.627	26.806	35.637	44.079	34.732	34.744	5.43	4.85	1.15	16.30	0.00			594	222222255
9	700.7	8.994	8.916	26.859	35.721	44.193	34.651	34.656	5.21	6.70	1.34	19.40	0.00			694	222222255
8	798.9	7.767	7.685	26.960	35.879	44.405	34.541	34.561	4.75	13.43	1.67	24.70	0.00			791	222222255
7	899.7	6.561	6.476	27.070	36.047	44.626	34.467	34.468	4.56	20.85	1.91	28.30	0.00			890	222222255
6	999.3	5.222	5.137	27.186	36.229	44.870	34.403	34.407	4.43	31.96	2.16	31.80	0.00			989	222222255
5	1198.6	3.847	3.756	27.385	36.497	45.203	34.464	34.462	3.83	60.27	2.49	36.10	0.00			1185	222222255
4	1398.9	3.269	3.167	27.513	36.654	45.388	34.553	34.551	3.56	76.76	2.57	36.90	0.00			1383	222222255
3	1600.5	2.898	2.783	27.602	36.763	45.515	34.621	34.622	3.60	86.02	2.55	36.30	0.00			1582	222222255
2	1800.6	2.664	2.535	27.664	36.837	45.601	34.671	34.671	3.63	94.60	2.51	35.70	0.00			1779	222222255
1	1840.6	2.592	2.595	27.679	36.856	45.624	34.682		3.67	96.60	2.51	35.30	0.00			1818	252222255

CRUISE: CD 29 STA: 72 DATE (D/M/Y): 6-12-87 TIME: 1649 LAT: 30 4.66 S LONG: 29 29.06 E

GRAVITY= 9.7933 M/S CORIOLIS= -.73092E-04 1/5 SOUND SPEED= 1493.0 M/S Depth= 2282 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	21.180	35.908	5.44	21.180	25.137	33.541	41.584	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.180	35.908	5.44	21.180	25.137	33.541	41.584	0.003	0.0	-0.39	0.000	0.00	0.000	1.0
20	18.559	35.800	5.68	18.556	25.747	34.232	42.351	0.052	0.1	-53.95	-1.701	-681.77	6.228	19.9
30	18.187	35.785	5.71	18.182	25.830	34.327	42.458	0.074	0.1	-26.70	-2.940	-315.83	3.727	29.8
40	17.931	35.753	5.70	17.924	25.869	34.375	42.513	0.095	0.2	-16.49	-1.823	-192.43	2.909	39.8
50	17.707	35.723	5.75	17.699	25.901	34.415	42.561	0.116	0.3	-22.34	-2.739	-242.74	3.268	49.7
100	15.475	35.485	5.80	15.459	26.245	34.838	43.058	0.215	1.0	-51.76	-5.265	-552.63	4.930	99.4
125	14.504	35.402	5.48	14.485	26.395	35.024	43.278	0.258	1.5	-28.26	-3.068	-279.77	3.508	124.3
150	13.908	35.331	5.38	13.886	26.468	35.120	43.395	0.299	2.1	-17.49	-1.560	-173.75	2.764	149.1
200	12.845	35.182	5.46	12.818	26.571	35.266	43.581	0.376	3.5	-17.54	-2.827	-100.01	2.097	198.8
250	12.310	35.124	5.44	12.276	26.632	35.349	43.684	0.451	5.2	-8.18	-0.887	-67.21	1.719	248.4
300	11.888	35.057	5.48	11.849	26.662	35.396	43.749	0.524	7.2	-8.12	-1.212	-46.54	1.431	298.0
350	11.359	34.972	5.56	11.315	26.697	35.454	43.827	0.596	9.6	-11.45	-1.808	-56.80	1.581	347.6
400	10.893	34.904	5.58	10.844	26.729	35.506	43.898	0.667	12.3	-7.48	-1.079	-40.40	1.333	397.2
450	10.508	34.848	5.60	10.454	26.755	35.549	43.957	0.736	15.3	-6.66	-0.928	-36.41	1.266	446.8
500	10.189	34.804	5.57	10.130	26.777	35.585	44.007	0.806	18.7	-7.28	-0.936	-42.94	1.374	496.4
600	9.443	34.707	5.46	9.374	26.828	35.670	44.123	0.942	26.3	-9.18	-1.132	-52.76	1.523	595.5
700	8.536	34.611	5.08	8.461	26.899	35.782	44.274	1.073	35.0	-11.59	-0.956	-86.18	1.947	694.6
800	7.041	34.500	4.69	6.963	27.030	35.983	44.541	1.195	44.4	-15.62	-1.051	-116.10	2.260	793.6
900	5.686	34.423	4.52	5.607	27.145	36.165	44.784	1.304	53.8	-14.48	-0.607	-114.08	2.240	892.5
1000	4.455	34.390	4.39	4.376	27.262	36.343	45.020	1.400	63.1	-7.13	0.249	-82.39	1.904	991.4
1200	3.636	34.484	3.77	3.547	27.422	36.544	45.260	1.564	81.5	-3.49	0.453	-57.73	1.594	1189.0
1400	3.191	34.570	3.56	3.089	27.534	36.679	45.416	1.703	99.8	-1.65	0.316	-32.93	1.204	1386.4
1600	2.813	34.642	3.59	2.699	27.626	36.791	45.547	1.825	118.4	-1.64	0.291	-31.83	1.183	1583.5
1800	2.570	34.683	3.71	2.442	27.682	36.860	45.628	1.932	137.1	-1.38	0.187	-23.54	1.018	1780.5
2000	2.311	34.711	3.81	2.169	27.727	36.919	45.701	2.031	156.2	-1.35	0.088	-17.94	0.888	1977.3
2200	2.125	34.720	3.93	1.969	27.750	36.953	45.746	2.123	176.0	-0.52	0.018	-17.94	0.800	2173.9
2283	2.117	34.721	3.95	1.954	27.752	36.956	45.749	2.161	184.6	-0.21	0.009	-17.94	0.800	2255.4

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
19	12.8	19.167	19.165	25.595	34.061	42.162	35.805	35.814	5.45	1.42	0.19	-0.10	0.00				12	222222255
18	104.2	15.891	15.875	26.117	34.696	42.903	35.442	35.550	5.71	1.21	0.26	0.00	0.00				103	222222255
17	203.3	13.255	13.227	26.481	35.160	43.460	35.172	35.256	5.35	2.31	0.63	7.10	0.00				201	222222255
16	301.8	11.781	11.741	26.682	35.421	43.777	35.056	35.031	5.52	3.32	0.79	10.30	0.00				299	222222255
15	400.7	10.844	10.795	26.737	35.516	43.911	34.903	34.888	5.59	3.92	0.91	12.30	0.00				397	222222255
14	501.1	10.116	10.057	26.789	35.600	44.024	34.803	34.793	5.49	4.62	1.03	14.50	0.00				496	222222255
13	599.7	9.443	9.375	26.829	35.671	44.123	34.708	34.712	5.42	5.33	1.17	16.60	0.00				594	222222255
12	699.6	8.627	8.551	26.886	35.765	44.253	34.613	34.619	5.05	6.54	1.40	20.50	0.00				693	222222255
11	799.3	7.154	7.076	27.016	35.964	44.516	34.502	34.507	4.67	16.78	1.73	25.50	0.00				791	222222255
10	900.6	5.724	5.645	27.140	36.158	44.775	34.422	34.423	4.53	26.53	2.01	29.30	0.00				891	222222255
9	1100.4	3.971	3.888	27.356	36.462	45.162	34.445	34.442	3.98	55.46	2.37	34.00	0.00				1089	222222255
8	1300.8	3.324	3.230	27.497	36.635	45.366	34.540	34.550	3.61	75.16	2.49	35.30	0.00				1286	222222255
7	1500.5	2.967	2.860	27.583	36.740	45.489	34.606	34.613	3.60	85.30	2.50	35.10	0.00				1483	222222255
6	1701.5	2.666	2.545	27.657	36.829	45.593	34.663	34.665	3.68	93.14	2.42	34.60	0.00				1681	222222255
5	1899.9	2.435	2.301	27.707	36.892	45.668	34.700	34.702	3.76	100.78	2.41	34.20	0.00				1876	222222255
4	2101.7	2.190	2.042	27.742	36.941	45.729	34.717	34.717	3.87	107.11	2.40	33.90	0.00				2075	222222255
3	2201.7	2.120	1.964	27.750	36.954	45.746	34.720	34.722	3.91	108.52	2.36	33.90	0.00				2173	222222255
2	2281.7	2.118	1.955	27.752	36.956	45.749	34.721	34.725	3.92	108.72	2.37	33.80	0.00				2251	222222255

CRUISE: CD 29 STA: 73 DATE (D/M/Y): 7-12-87 TIME: 0011 LAT: 30 20.00 S LONG: 90 30 30 E

GRAVITY= 9.7935 M/S CORIOLIS= -.73655E-04 1/S SOUND SPEED= 1494.7 M/S Depth= 1670 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	21.036	35.027	5.26	21.036	24.506	32.924	40.981	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.036	35.027	5.26	21.036	24.506	32.924	40.981	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	19.866	35.829	5.71	19.862	25.432	33.876	41.957	0.057	0.1	-34.44	6.771	-1028.07	6.699	19.9
30	19.579	35.880	5.57	19.574	25.546	33.999	42.087	0.082	0.1	-28.66	0.835	-586.21	5.058	29.9
40	19.129	35.874	5.64	19.122	25.660	34.126	42.227	0.106	0.2	-54.72	-0.520	-988.88	6.570	39.6
50	18.759	35.896	5.65	18.750	25.771	34.249	42.361	0.128	0.3	-18.64	1.377	-418.89	4.276	49.7
120	17.048	35.712	5.85	17.031	26.054	34.590	42.757	0.235	1.1	-35.22	-2.938	-450.55	4.435	99.4
25	16.334	35.644	5.64	16.314	26.172	34.733	42.923	0.283	1.7	-30.37	-2.797	-345.10	3.881	124.3
150	15.503	35.564	5.37	15.480	26.300	34.892	43.110	0.329	2.3	-38.41	-4.370	-373.78	4.039	149.1
200	13.958	35.371	5.39	13.929	26.489	35.139	43.413	0.411	3.8	-23.30	-3.624	-157.35	2.621	198.8
250	12.962	35.223	5.39	12.927	26.581	35.271	43.581	0.489	5.6	-18.51	-2.852	-115.31	2.243	248.4
300	12.205	35.103	5.47	12.165	26.638	35.359	43.699	0.564	7.7	-12.37	-1.882	-72.08	1.774	298.1
350	11.613	35.014	5.49	11.568	26.683	35.428	43.792	0.637	10.1	-11.81	-1.777	-65.73	1.694	347.7
400	11.177	34.949	5.50	11.127	26.713	35.478	43.859	0.708	12.8	-7.28	-1.031	-42.14	1.356	397.3
450	10.822	34.898	5.56	10.766	26.739	35.519	43.914	0.779	15.9	-8.49	-1.194	-47.90	1.446	446.9
500	10.390	34.838	5.52	10.330	26.769	35.568	43.981	0.848	19.2	-8.02	-1.117	-44.06	1.387	496.4
600	9.592	34.730	5.44	9.522	26.822	35.657	44.104	0.985	26.9	-7.79	-0.978	-45.17	1.404	595.5
700	8.784	34.638	5.18	8.707	26.882	35.753	44.234	1.118	35.7	-9.13	-0.844	-64.98	1.683	694.6
800	7.346	34.523	4.72	7.267	27.006	35.944	44.488	1.243	45.3	-17.68	-1.251	-133.22	2.411	793.6
900	6.017	34.444	4.50	5.936	27.122	36.125	44.729	1.355	55.0	-13.74	-0.608	-109.62	2.187	892.6
1000	4.801	34.410	4.25	4.720	27.240	36.303	44.964	1.454	64.5	-7.36	0.127	-79.74	1.866	991.4
1200	3.829	34.507	3.54	3.738	27.421	36.533	45.239	1.621	83.2	-3.82	0.348	-55.86	1.561	1189.0
1400	3.279	34.561	3.50	3.176	27.518	36.659	45.392	1.762	101.9	-1.54	0.216	-26.74	1.080	1386.4
1600	3.009	34.612	3.52	2.893	27.585	36.740	45.487	1.890	121.5	-1.62	0.279	-26.74	0.000	1583.6
1663	2.927	34.627	3.52	2.806	27.605	36.764	45.515	1.928	127.8	-1.41	0.260	-26.74	0.000	1645.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
15	2.6	21.138	21.137	24.173	32.594	40.652	34.626	36.011	5.23	2.52	0.18	0.00	0.00	1.951		2	222222225
14	102.6	17.211	17.194	26.011	34.542	42.703	35.700	35.701	5.68	1.50	0.25	0.10	0.00	2.205		101	222222225
13	202.4	13.954	13.925	26.483	35.133	43.407	35.361	35.372	5.26	2.65	0.57	5.70	0.00	2.138		200	222222225
12	298.9	12.327	12.287	26.617	35.333	43.669	35.107	35.137	5.35	3.13	0.77	9.50	0.00	2.059		296	222222225
11	400.5	11.338	11.287	26.683	35.441	43.816	34.948	34.974	5.48	3.96	0.89	11.40	0.00	2.021		397	222222225
10	498.9	10.537	10.476	26.744	35.537	43.945	34.839	34.856	5.50	4.44	1.00	13.50	0.00	1.746		494	222222225
9	600.5	9.612	9.542	26.819	35.653	44.098	34.730	34.738	5.43	5.09	1.18	16.20	0.00	1.734		595	222222225
8	700.9	8.755	8.679	26.885	35.758	44.241	34.637	34.640	5.12	7.93	1.39	20.00	0.00	1.083		694	222222225
7	799.3	7.306	7.227	27.013	35.954	44.499	34.525	34.525	4.68	15.96	1.75	25.40	0.00	0.463		791	222222225
6	888.9	6.123	6.103	27.113	36.110	44.710	34.450		4.53	25.16	2.03	28.80	0.00	0.276		880	222222225
5	1000.7	4.742	4.661	27.247	36.313	44.977	34.411	34.415	4.22	41.06	2.28	32.30	0.00	0.129		990	222222225
4	1200.3	3.814	3.723	27.422	36.535	45.242	34.507	34.509	3.51	69.39	2.56	35.60	0.00	0.015		1187	222222225
3	1401.4	3.277	3.174	27.518	36.659	45.392	34.560	34.563	3.51	78.94	2.57	36.00	0.00	0.009		1385	222222225
2	1599.1	3.002	2.886	27.586	36.741	45.488	34.612	34.613	3.51	86.32	2.55	35.60	0.00	0.006		1580	222222225
1	1661.0	2.928	2.806	27.604	36.764	45.514	34.628	34.628	3.53	87.99	2.55	35.50	0.00	0.007		1641	222222225

CRUISE: CD 29 STA: 74 DATE (D/M/Y): 7-12-87 TIME: 0825 LAT: 30 40.05 S LONG: 91 49.63 E

GRAVITY= 9.7938 M/S CORIOLIS= -.74387E-04 1/S SOUND SPEED= 1492.7 M/S Depth= 1928 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	21.118	35.642	4.59	21.118	24.952	33.361	41.408	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	21.118	35.642	4.59	21.118	24.952	33.361	41.408	0.003	0.0	-0.38	0.000	0.00	0.000	1.0
20	18.064	35.711	5.45	18.061	25.803	34.305	42.440	0.051	0.0	-54.39	1.922	-1090.99	6.867	19.9
30	17.688	35.718	5.49	17.683	25.901	34.416	42.562	0.072	0.1	-25.09	0.554	-479.27	4.551	29.8
40	17.506	35.729	5.51	17.499	25.955	34.475	42.627	0.093	0.2	-14.70	1.011	-317.73	3.706	39.8
50	17.261	35.721	5.60	17.252	26.008	34.536	42.696	0.113	0.3	-43.25	-3.442	-568.33	4.956	49.7
100	14.893	35.512	5.48	14.878	26.394	35.008	43.247	0.204	1.0	-39.02	-4.707	-365.52	3.975	99.4
125	14.006	35.397	5.31	13.988	26.497	35.145	43.416	0.244	1.4	-35.45	-4.523	-303.97	3.625	124.3
150	13.321	35.307	5.28	13.300	26.570	35.245	43.541	0.282	2.0	-13.48	-1.027	-109.36	2.174	149.1
200	12.619	35.199	5.36	12.592	26.629	35.332	43.655	0.357	3.3	-18.12	-2.987	-97.59	2.054	198.7
250	11.948	35.087	5.44	11.915	26.673	35.404	43.754	0.429	4.9	-14.99	-2.510	-71.41	1.757	248.4
300	11.360	34.988	5.49	11.322	26.707	35.464	43.837	0.499	6.9	-10.00	-1.650	-45.25	1.398	298.0
350	10.840	34.901	5.54	10.797	26.735	35.514	43.908	0.569	9.2	-10.51	-1.715	-45.34	1.400	347.6
400	10.411	34.831	5.56	10.363	26.758	35.555	43.967	0.638	11.9	-7.39	-1.124	-34.68	1.224	397.2
450	10.075	34.785	5.53	10.022	26.780	35.593	44.019	0.706	14.8	-6.58	-0.783	-41.86	1.345	446.8
500	9.747	34.741	5.48	9.689	26.803	35.630	44.070	0.774	18.1	-5.57	-0.658	-34.87	1.228	496.4
600	9.026	34.650	5.37	8.959	26.851	35.711	44.182	0.907	25.6	-6.25	-0.737	-36.79	1.261	595.5
700	8.328	34.584	5.06	8.254	26.909	35.802	44.302	1.036	34.1	-10.34	-0.822	-78.62	1.843	694.5
800	7.122	34.499	4.68	7.043	27.018	35.967	44.521	1.159	43.5	-13.87	-0.889	-106.96	2.150	793.5
900	5.658	34.413	4.52	5.579	27.141	36.162	44.783	1.268	53.0	-11.47	-0.511	-90.92	1.982	892.5
1000	4.647	34.392	4.39	4.567	27.242	36.314	44.982	1.367	62.5	-7.29	0.204	-83.61	1.901	991.3
1200	3.790	34.496	3.67	3.699	27.416	36.531	45.239	1.535	81.3	-2.97	0.479	-55.95	1.555	1188.9
1400	3.341	34.572	3.45	3.238	27.521	36.658	45.388	1.677	100.2	-2.10	0.320	-38.46	1.289	1386.3
1600	3.000	34.622	3.50	2.884	27.594	36.749	45.496	1.804	119.5	-1.75	0.265	-32.03	1.177	1583.5
1800	2.724	34.668	3.58	2.594	27.656	36.826	45.587	1.918	139.3	-1.47	0.203	-26.07	1.061	1780.5
1935	2.550	34.690	3.63	2.411	27.690	36.870	45.639	1.990	152.9	-0.93	0.115	-26.07	0.000	1913.4

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
16	12.6	18.128	18.126	25.765	34.265	42.399	35.683	35.818	5.52	1.22	0.22	0.20	0.00	2.055		12	222222225
15	103.6	14.845	14.830	26.397	35.012	43.253	35.501	35.515	5.52	1.06	0.38	2.70	0.00	2.102		102	222222225
14	202.0	12.660	12.633	26.616	35.317	43.639	35.192	35.225	5.40	2.07	0.73	8.10	0.00	2.206		200	222222225
13	301.4	11.250	11.213	26.726	35.486	43.863	34.985	34.975	5.55	2.57	0.87	11.20	0.00	2.242		298	222222225
12	402.3	10.323	10.275	26.770	35.572	43.987	34.827	34.821	5.60	3.75	0.99	13.50	0.00	2.118		398	222222225
11	501.0	9.732	9.674	26.805	35.634	44.074	34.741	34.739	5.49	5.26	1.13	16.00	0.00	1.883		496	222222225
10	602.3	9.024	8.957	26.850	35.710	44.181	34.648	34.650	5.41	5.09	1.28	18.40	0.00	1.605		596	222222225
9	700.1	8.301	8.226	26.913	35.806	44.308	34.583	34.585	5.02	9.12	1.51	22.10	0.00	1.007		693	222222225
8	800.5	7.180	7.155	27.010	35.956	44.508	34.498		4.65	16.15	1.79	26.20	0.00	0.552		792	252222225
7	899.5	5.746	5.667	27.131	36.148	44.764	34.414	34.418	4.55	25.68	2.04	29.00	0.00	0.359		890	222222225
6	1000.6	4.654	4.574	27.242	36.313	44.981	34.393	34.394	4.43	38.06	2.24	32.40	0.00	0.207		990	222222225
5	1199.6	3.807	3.717	27.414	36.528	45.235	34.496	34.496	3.62	66.99	2.50	35.70	0.00	0.035		1186	222222225
4	1400.2	3.336	3.233	27.522	36.659	45.390	34.572	34.573	3.40	81.53	2.56	36.30	0.00	0.007		1384	222222225
3	1600.9	2.995	2.879	27.594	36.750	45.497	34.622	34.626	3.49	88.54	2.54	36.00	0.00	0.004		1502	222222225
2	1802.4	2.711	2.581	27.657	36.820	45.590	34.668	34.670	3.60	95.72	2.49	35.60	0.00			1780	222222255
1	1934.6	2.533	2.394	27.690	36.870	45.641	34.688	34.692	3.65	100.56	2.48	35.20	0.00	0.005		1910	222222225

CRUISE: CD 29 STA: 75 DATE (D/M/Y): 7-12-87 TIME: 1728 LAT: 30 50.29 S LONG: 93 24.64 E

GRAVITY= 9.7939 M/S CORIOLIS= -.74761E-04 1/S SOUND SPEED= 1495.9 M/S Depth= 1248 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	P-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	1/DB 10-3	(m s)-1 10-12	CPH	METERS
0	19.600	35.665	4.18	19.600	25.375	33.830	41.920	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.600	35.665	4.18	19.600	25.376	33.830	41.920	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.885	35.741	5.56	18.882	25.821	34.322	42.456	0.049	0.0	-18.06	4.111	-559.60	4.906	19.9
30	17.988	35.774	5.59	17.983	25.870	34.374	42.511	0.070	0.1	-19.47	1.872	-458.28	4.439	29.8
40	17.809	35.789	5.58	17.802	25.926	34.436	42.578	0.091	0.2	-14.12	2.238	-380.42	4.045	39.8
50	17.720	35.835	5.64	17.712	25.984	34.496	42.641	0.112	0.3	-5.48	2.501	-239.18	3.207	49.7
100	15.646	35.823	5.71	15.630	26.312	34.897	43.110	0.208	1.0	-43.51	-4.554	-472.18	4.506	99.4
125	14.745	35.509	5.54	14.726	26.426	35.044	43.289	0.250	1.5	-20.36	-2.868	-168.17	2.689	124.3
150	14.290	35.451	5.48	14.268	26.480	35.116	43.377	0.290	2.0	-19.95	-2.617	-158.50	2.611	149.1
200	13.266	35.307	5.33	13.238	26.583	35.260	43.558	0.367	3.4	-18.46	-2.652	-129.66	2.361	198.7
250	12.319	35.157	5.43	12.285	26.656	35.372	43.787	0.440	5.1	-18.87	-3.324	-86.47	1.928	248.4
300	11.607	35.025	5.49	11.568	26.691	35.436	43.880	0.512	7.1	-11.63	-2.029	-48.81	1.449	298.0
350	11.036	34.928	5.53	10.992	26.721	35.492	43.878	0.582	9.4	-8.66	-1.412	-38.95	1.294	347.6
400	10.549	34.851	5.54	10.500	26.749	35.541	43.948	0.652	12.1	-8.26	-1.285	-38.32	1.284	397.2
450	10.211	34.799	5.53	10.157	26.769	35.575	43.996	0.721	15.1	-7.38	-1.056	-37.81	1.275	446.8
500	9.835	34.748	5.47	9.777	26.793	35.617	44.053	0.789	18.4	-6.35	-0.804	-37.32	1.267	496.4
600	9.190	34.668	5.35	9.123	26.839	35.692	44.156	0.923	25.9	-7.62	-0.881	-47.00	1.422	595.5
700	8.382	34.598	5.04	8.308	26.912	35.802	44.308	1.054	34.6	-9.04	-0.662	-72.54	1.766	694.5
800	7.134	34.505	4.70	7.055	27.022	35.970	44.524	1.176	43.9	-16.44	-1.120	-125.29	2.321	793.5
900	5.901	34.430	4.53	5.826	27.125	36.133	44.743	1.285	53.4	-10.07	-0.477	-79.81	1.853	892.5
1000	4.938	34.399	4.38	4.856	27.216	36.272	44.927	1.385	63.1	-9.57	0.033	-96.96	2.042	991.4
1200	3.755	34.469	3.83	3.665	27.398	36.515	45.225	1.555	82.1	-2.91	0.268	-96.96	0.000	1189.0
1237	3.717	34.472	3.76	3.624	27.405	36.523	45.236	1.584	85.6	-3.08	0.227	-96.96	0.000	1225.5

BOTL	PRES	CTD	TMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
12	15.3	17.996	17.993	25.820	34.324	42.461	35.711	35.830	5.57	1.79	0.20	0.10	0.00	2.143			15	22222225
11	104.1	14.967	14.951	26.445	35.054	43.290	35.598	35.549	5.62								103	22255555
10	202.2	13.289	13.261	26.574	35.250	43.548	35.301	35.310	5.38	2.30	0.60	6.50	0.00	2.290			200	22222225
9	300.7	11.717	11.679	26.669	35.411	43.770	35.024	35.059	5.57	2.81	0.76	9.50	0.00	2.300			298	22222225
8	402.1	10.595	10.546	26.737	35.527	43.932	34.846	34.859	5.63	3.98	0.94	12.60	0.00	2.322			398	22222225
7	501.3	9.888	9.749	26.798	35.623	44.060	34.748	34.746	5.52	4.96	1.09	15.20	0.00	1.978			496	22222225
6	601.0	9.174	9.106	26.841	35.694	44.159	34.667	34.668	5.46	4.17	1.25	17.60	0.00	1.761			595	22222225
5	751.5	7.979	7.901	26.942	35.851	44.367	34.558	34.572	4.84	11.62	1.58	23.00	0.00	0.699			744	22222225
4	899.6	5.909	5.828	27.124	36.132	44.741	34.430	34.427	4.56	25.02	2.01	29.10	0.00	0.349			890	22222225
3	1000.3	4.900	4.817	27.220	36.270	44.935	34.399	34.398	4.42	35.60	2.15	31.40	0.00	0.220			990	22222225
2	1100.7	4.096	4.011	27.331	36.430	45.125	34.429	34.431	4.03	52.14	2.31	34.20	0.00	0.086			1089	22222225
1	1236.3	3.714	3.621	27.405	36.523	45.236	34.472	34.472	3.82	62.56	2.46	35.10	0.00	0.045			1223	22222225

CRUISE: CD 29 STA: 76 DATE (D/M/Y): 8-12-87 TIME: 0101 LAT: 31 18.82 S LONG 94 26.11 E

GRAVITY= 9.7942 M/S CORIOLIS= -.75507E-04 1/S SOUND SPEED= 1494.9 M/S Depth= 1571 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	20.108	35.817	5.03	20.108	25.358	33.794	41.868	0.000	0.0	-0.19	0.000	0.00	0.000	0.0
1	20.108	35.817	5.03	20.108	25.358	33.794	41.868	0.003	0.0	-0.37	0.000	0.00	0.000	1.0
20	19.306	35.877	5.48	19.302	25.615	34.076	42.172	0.051	0.1	-43.75	2.339	-970.16	6.427	19.9
30	18.938	35.897	5.49	18.932	25.725	34.197	42.304	0.074	0.1	-51.62	-0.556	-944.26	6.341	29.8
40	18.523	35.881	5.56	18.516	25.819	34.304	42.424	0.096	0.2	-23.94	-3.215	-265.33	3.361	39.8
50	18.249	35.852	5.59	18.240	25.866	34.361	42.489	0.118	0.3	-32.69	-2.305	-475.13	4.498	49.7
100	16.374	35.689	5.62	16.358	26.196	34.755	42.943	0.218	1.0	-43.80	-4.666	-498.30	4.606	99.4
125	15.337	35.576	5.46	15.317	26.346	34.943	43.167	0.262	1.6	-45.81	-6.087	-440.88	4.333	124.3
150	14.683	35.503	5.39	14.661	26.435	35.056	43.303	0.304	2.1	-13.77	-0.603	-189.12	2.838	149.1
200	13.691	35.376	5.32	13.663	26.549	35.209	43.492	0.383	3.6	-19.80	-2.992	-137.04	2.416	198.8
250	12.772	35.223	5.41	12.738	26.619	35.316	43.633	0.458	5.3	-13.20	-2.083	-79.03	1.834	248.4
300	11.939	35.082	5.49	11.900	26.672	35.404	43.754	0.531	7.3	-16.40	-2.872	-74.37	1.780	298.0
350	11.443	35.000	5.53	11.398	26.703	35.456	43.826	0.603	9.7	-12.25	-1.968	-60.84	1.610	347.6
400	10.921	34.913	5.53	10.872	26.731	35.507	43.898	0.673	12.4	-9.11	-1.454	-42.90	1.352	397.2
450	10.426	34.835	5.55	10.372	26.759	35.557	43.968	0.743	15.4	-7.56	-1.143	-37.21	1.259	446.8
500	10.034	34.777	5.54	9.975	26.782	35.597	44.025	0.812	18.7	-6.76	-0.905	-38.59	1.282	496.4
600	9.397	34.694	5.45	9.328	26.825	35.669	44.124	0.948	26.4	-7.35	-0.924	-43.07	1.354	595.5
700	8.778	34.619	5.32	8.702	26.867	35.740	44.221	1.081	35.2	-6.85	-0.646	-48.93	1.443	694.6
800	7.729	34.535	4.84	7.647	26.961	35.882	44.410	1.289	45.0	-12.70	-0.886	-102.36	2.088	793.6
900	6.188	34.441	4.55	6.106	27.098	36.092	44.689	1.325	55.1	-17.29	-0.930	-137.89	2.423	892.5
1000	4.774	34.392	4.38	4.693	27.228	36.293	44.955	1.427	64.9	-11.05	0.017	-113.65	2.200	991.4
1200	3.883	34.475	3.79	3.792	27.390	36.499	45.204	1.598	84.1	-2.51	0.485	-52.64	1.497	1189.0
1400	3.375	34.540	3.55	3.272	27.493	36.629	45.357	1.747	103.7	-2.08	0.278	-36.27	1.243	1386.4
1559	3.086	34.586	3.52	2.972	27.558	36.709	45.452	1.853	119.8	-2.29	0.426	-36.27	0.000	1543.2

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILICAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
12	5.0	20.217	20.216	25.323	33.756	41.827	35.809	35.991	5.29	2.43	0.24	0.10	0.00	1.749		4	222222225
11	103.1	16.389	16.372	26.185	34.744	42.932	35.679	35.694	5.55	1.95	0.32	0.20	0.00	1.999		102	222222225
10	203.6	13.524	13.495	26.564	35.231	43.520	35.351	35.357	5.31	2.46	0.56	0.10	0.00	2.104		201	222222225
9	301.7	12.131	12.091	26.631	35.355	43.698	35.076	35.115	5.50	3.13	0.74	0.90	0.00	2.314		299	222222225
8	402.4	10.919	10.869	26.728	35.504	43.895	34.908	34.920	5.58	3.65	0.89	11.90	0.00	2.188		398	222222225
7	502.1	10.141	10.081	26.765	35.576	43.999	34.778	34.792	5.58	4.49	1.01	14.00	0.00	2.103		497	222222225
6	602.9	9.526	9.457	26.801	35.640	44.089	34.690	34.709	5.46	4.00	1.14	16.30	0.00	1.876		597	222222225
5	801.7	7.865	7.782	26.941	35.856	44.377	34.535	34.550	4.78	11.29	1.63	23.70	0.00	0.760		794	222222225
4	1001.7	4.761	4.680	27.230	36.295	44.958	34.392	34.390	4.41	34.80	2.16	31.70	0.00	0.197		991	222222225
3	1201.3	3.831	3.740	27.398	36.510	45.217	34.478	34.466	3.79	60.62	2.42	35.10	0.00	0.044		1188	222222225
2	1400.2	3.371	3.268	27.493	36.629	45.350	34.540	34.546	3.55	75.18	2.49	35.80	0.00	0.011		1384	222222225
1	1550.2	3.086	2.972	27.557	36.708	45.452	34.586	34.582	3.52	79.98	2.46	35.70	0.00	0.010		1540	222222225

CRUISE: CD 29 STA: 77 DATE (D/M/Y): 8-12-87 TIME: 0731 LAT: 31 33.96 S LONG: 95 27.31 E

GRAVITY= 9.7945 M/S CORIOLIS= -.76345E-04 1/S SOUND SPEED= 1500.1 M/S Depth= 1223 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-10	B-V CPH	DEPTH METERS
0	19.355	35.621	4.93	19.355	25.405	33.868	41.965	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.355	35.621	4.93	19.355	25.405	33.868	41.965	0.003	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.737	35.866	5.55	17.733	26.003	34.513	42.657	0.045	0.0	-47.17	1.950	-978.17	6.418	19.9
30	17.389	35.883	5.53	17.384	26.101	34.623	42.777	0.064	0.1	-14.06	1.438	-338.05	3.773	29.8
40	17.320	35.896	5.57	17.313	26.128	34.652	42.808	0.083	0.2	-3.70	1.162	-133.70	2.373	39.8
50	17.286	35.908	5.55	17.278	26.146	34.671	42.828	0.102	0.2	-4.53	0.902	-133.78	2.374	49.7
100	16.002	35.890	5.60	16.985	26.202	34.737	42.904	0.195	1.0	-11.10	-1.324	-123.17	2.278	99.4
125	16.617	35.838	5.61	16.597	26.254	34.804	42.983	0.240	1.5	-15.88	-1.998	-166.85	2.651	124.2
150	16.164	35.771	5.51	16.140	26.310	34.875	43.070	0.285	2.1	-30.99	-5.650	-203.44	2.927	149.1
200	14.856	35.559	5.48	14.825	26.442	35.057	43.297	0.369	3.6	-4.21	0.525	-100.71	2.059	198.7
250	14.520	35.547	5.36	14.483	26.508	35.135	43.387	0.450	5.5	-22.26	-4.073	-130.73	2.346	248.4
300	13.435	35.356	5.41	13.393	26.589	35.259	43.552	0.528	7.7	-16.78	-2.634	-112.37	2.175	298.0
350	12.504	35.188	5.48	12.456	26.648	35.356	43.684	0.603	10.1	-19.75	-3.693	-86.87	1.913	347.6
400	11.912	35.080	5.51	11.859	26.679	35.412	43.764	0.677	13.0	-13.12	-2.379	-55.55	1.530	397.2
450	11.390	34.986	5.56	11.333	26.704	35.460	43.833	0.749	16.1	-10.65	-1.810	-48.60	1.431	446.8
500	10.893	34.905	5.57	10.831	26.733	35.510	43.903	0.821	19.6	-11.19	-1.742	-57.59	1.557	496.4
600	9.969	34.769	5.52	9.898	26.789	35.608	44.039	0.961	27.4	-7.00	-0.940	-40.93	1.313	595.5
700	9.302	34.682	5.43	9.222	26.834	35.682	44.142	1.099	36.5	-6.40	-0.786	-39.25	1.286	694.6
800	8.575	34.605	5.20	8.488	26.890	35.772	44.262	1.233	46.8	-9.96	-0.843	-77.00	1.801	793.6
900	7.186	34.504	4.73	7.097	27.014	35.961	44.513	1.358	57.6	-14.16	-0.934	-115.22	2.203	892.6
1000	5.574	34.413	4.51	5.487	27.152	36.178	44.803	1.470	68.5	-14.93	-0.650	-125.93	2.303	991.5
1200	4.096	34.429	3.99	4.003	27.331	36.431	45.126	1.656	89.3	-5.26	0.404	-125.93	0.000	1189.1
1213	3.970	34.438	3.99	3.877	27.352	36.458	45.159	1.667	90.6	-5.24	0.432	-125.93	0.000	1201.9

BOTL NO.	PRES DBAR	CTDTEMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH METERS	QUALT1
							PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG			
2	14.0	17.806	17.804	25.974	34.482	42.624	35.851	35.924	5.56	0.89	0.18	0.20	0.00			13	222222255
1	101.8	16.798	16.781	26.249	34.791	42.964	35.888	35.870	5.57	1.04	0.19	0.20	0.00	2.251	1.243	100	222222222
24	151.9	15.615	15.591	26.434	35.018	43.231	35.769	35.676	5.59	0.70	0.28	1.50	0.00	2.363	1.318	150	222222222
23	202.1	14.872	14.841	26.442	35.056	43.296	35.563	35.570	5.44	0.69	0.38	2.70	0.00	2.299	1.351	200	222222222
22	250.9	14.492	14.455	26.512	35.140	43.393	35.545	35.540	5.34	1.84	0.41	4.10	0.00	2.316	1.257	248	222222222
21	303.2	13.387	13.344	26.594	35.266	43.560	35.349	35.350	5.39	1.50	0.58	6.30	0.00	2.336	1.308	300	222222222
20	400.4	12.009	11.956	26.658	35.387	43.735	35.077	35.097	5.54	2.15	0.77	9.40	0.00	2.372	1.333	396	222222222
19	501.5	10.931	10.869	26.723	35.499	43.891	34.902	34.909	5.59	2.80	0.91	12.10	0.00	2.369	1.315	497	222222222
18	600.8	9.968	9.897	26.789	35.607	44.038	34.768	34.768	5.53	3.29	1.09	15.20	0.00	2.228	1.187	595	222222222
17	699.9	9.314	9.235	26.832	35.680	44.139	34.682	34.683	5.46	4.26	1.25	17.50	0.00	1.980	1.048	693	222222222
16	899.3	7.105	7.017	27.026	35.976	44.531	34.504	34.499	4.64	15.98	1.80	26.50	0.00	0.540	0.330	890	222222222
15	999.1	5.463	5.376	27.167	36.198	44.828	34.415	34.407	4.54	27.34	2.08	30.60	0.00	0.348	0.196	989	222222222
14	1100.5	4.530	4.442	27.259	36.337	45.011	34.396	34.397	4.38	39.04	2.16	32.90	0.00	0.207	0.148	1089	222222222
13	1212.2	3.941	3.848	27.354	36.461	45.164	34.437	34.444	3.96	55.18	2.43	34.90	0.00	0.093		1199	222222225

CRUISE: CD 29 STA: 78 DATE (D/M/Y): 8-12-87 TIME: 1401 LAT: 31 59.78 S LONG: 96 29.67 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77274E-04 1/S SOUND SPEED= 1495.5 M/S Depth= 1305 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPM	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.060	35.806	5.05	19.060	25.623	34.092	42.197	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.060	35.806	5.05	19.059	25.623	34.092	42.197	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.549	35.756	5.47	17.546	25.964	34.483	42.633	0.044	0.0	-103.58	-10.363	-1307.93	7.377	19.9
30	16.859	35.657	5.58	16.854	26.054	34.597	42.770	0.064	0.1	-26.63	-3.887	-254.16	3.252	29.0
40	17.029	35.748	5.52	17.023	26.084	34.620	42.787	0.083	0.2	46.22	18.008	-207.76	1.40	39.8
50	17.226	35.832	5.51	17.217	26.102	34.630	42.790	0.102	0.3	-5.74	-0.533	-73.99	1.555	49.7
100	15.334	35.602	5.50	15.318	26.367	34.963	43.187	0.192	0.9	-35.41	-4.841	-322.42	3.663	99.4
125	14.582	35.487	5.32	14.563	26.444	35.069	43.319	0.234	1.4	-22.75	-3.325	-179.94	2.736	124.2
150	14.021	35.411	5.22	13.999	26.506	35.152	43.423	0.273	2.0	-17.78	-2.374	-145.36	2.459	149.1
200	13.208	35.296	5.20	13.180	26.587	35.266	43.567	0.350	3.3	-17.90	-3.022	-101.26	2.053	198.7
250	12.248	35.118	5.32	12.215	26.640	35.359	43.697	0.423	5.0	-9.33	-1.451	-55.02	1.513	248.4
300	11.639	35.027	5.38	11.601	26.686	35.431	43.793	0.495	7.0	-13.08	-2.074	-69.33	1.699	298.0
350	11.073	34.926	5.44	11.030	26.713	35.482	43.867	0.566	9.4	-8.27	-1.215	-46.69	1.394	347.6
400	10.624	34.863	5.48	10.576	26.745	35.533	43.937	0.636	12.1	-8.82	-1.341	-44.79	1.365	397.2
450	10.250	34.806	5.45	10.197	26.767	35.573	43.991	0.705	15.1	-9.24	-1.295	-51.00	1.457	446.8
500	9.881	34.754	5.41	9.823	26.790	35.612	44.046	0.773	18.4	-6.27	-0.879	-33.26	1.176	496.4
600	9.248	34.676	5.36	9.180	26.835	35.686	44.147	0.908	25.9	-6.19	-0.726	-38.94	1.273	595.5
700	8.541	34.601	5.11	8.465	26.890	35.773	44.264	1.040	34.6	-8.06	-0.710	-61.15	1.595	694.5
800	7.517	34.528	4.71	7.436	26.986	35.917	44.453	1.165	44.2	-14.72	-1.055	-115.40	2.191	793.5
900	6.046	34.434	4.54	5.964	27.110	36.111	44.714	1.278	54.0	-13.81	-0.712	-111.05	2.150	892.5
1000	4.863	34.395	4.38	4.781	27.221	36.202	44.940	1.378	63.7	-7.40	-0.038	-74.74	1.764	991.4
1200	3.813	34.464	3.86	3.723	27.388	36.502	45.210	1.553	83.3	-3.92	0.570	-74.74	0.000	1189.0
1293	3.509	34.513	3.65	3.414	27.457	36.586	45.308	1.623	92.2	-3.40	0.529	-74.74	0.000	1280.8

BOTL	PRES	CTD TMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
13	3.2	18.491	18.490	25.773	34.261	42.382	35.813	35.817	5.46	1.23	0.18	0.20	0.00			3	222222255
12	104.1	14.632	14.617	26.506	35.128	43.375	35.583	35.497	5.62	1.58	0.36	3.60	0.00			103	222222255
11	202.1	12.627	12.600	26.692	35.394	43.715	35.282	35.190	5.37	2.42	0.64	8.80	0.00			200	222222255
10	302.5	11.391	11.353	26.743	35.498	43.869	35.041	34.983	5.57	3.27	0.82	11.60	0.00			299	222222255
9	401.8	10.517	10.469	26.763	35.556	43.963	34.861	34.849	5.56	3.78	0.93	13.90	0.00			398	222222255
8	502.8	9.850	9.792	26.794	35.617	44.053	34.752	34.751	5.49	4.46	1.08	16.20	0.00			498	222222255
7	601.9	9.143	9.076	26.852	35.707	44.172	34.675	34.661	5.37	5.48	1.23	18.80	0.00			596	222222255
6	702.3	8.463	8.388	26.900	35.786	44.281	34.598	34.598	5.05	6.69	1.43	22.10	0.00			695	222222255
5	801.4	7.371	7.291	27.006	35.944	44.487	34.528	34.520	4.67	15.27	1.68	26.20	0.00			793	222222255
4	898.7	6.023	5.941	27.113	36.116	44.720	34.434	34.429	4.55	24.05	1.95	29.80	0.00			889	222222255
3	1001.1	4.829	4.747	27.225	36.287	44.947	34.395	34.393	4.39	36.38	2.18	32.80	0.00			991	222222255
2	1200.7	3.788	3.697	27.392	36.507	45.216	34.466	34.469	3.81	61.87	2.40	36.00	0.00			1188	222222255
1	1291.1	3.504	3.409	27.457	36.586	45.309	34.512	34.515	3.60	71.18	2.46	36.00	0.00			1277	222222255

CRUISE: CD 29 STA: 79 DATE (D/M/Y): 8-12-87 TIME: 2136 LAT: 32 0.06 S LONG: 97 44.79 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77287E-04 1/S SOUND SPEED= 1495.0 M/S Depth= 1617 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.441	35.986	4.77	19.441	25.662	34.117	42.206	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.441	35.986	4.77	19.441	25.662	34.117	42.208	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.745	35.948	5.45	18.742	25.813	34.290	42.402	0.046	0.0	-90.95	-3.546	-1540.88	8.007	19.9
30	18.043	35.924	5.50	18.038	25.972	34.472	42.605	0.067	0.1	-44.09	-1.227	-758.15	5.616	29.8
40	17.681	35.916	5.55	17.674	26.055	34.567	42.712	0.087	0.2	-17.87	0.206	-344.48	3.786	39.8
50	17.554	35.916	5.58	17.546	26.087	34.603	42.752	0.106	0.3	-20.06	-1.791	-267.55	3.336	49.7
100	16.463	35.804	5.60	16.447	26.263	34.818	43.002	0.199	1.0	-16.42	0.030	-295.69	3.507	99.4
125	16.184	35.819	5.47	16.164	26.340	34.905	43.098	0.243	1.5	-16.28	-2.988	-106.50	2.106	124.3
150	15.610	35.702	5.47	15.586	26.383	34.969	43.182	0.285	2.1	-23.46	-4.585	-142.61	2.436	149.1
200	14.392	35.479	5.40	14.362	26.481	35.114	43.371	0.367	3.5	-19.69	-3.239	-136.12	2.380	198.7
250	13.445	35.341	5.38	13.409	26.574	35.244	43.536	0.446	5.3	-20.29	-3.212	-133.22	2.354	248.4
300	12.372	35.164	5.45	12.332	26.653	35.366	43.699	0.520	7.4	-13.47	-2.127	-80.02	1.825	298.0
350	11.778	35.060	5.47	11.733	26.687	35.426	43.782	0.593	9.8	-13.40	-2.310	-63.11	1.620	347.6
400	11.170	34.957	5.57	11.120	26.720	35.485	43.866	0.664	12.5	-13.84	-2.341	-61.87	1.604	397.2
450	10.549	34.854	5.57	10.494	26.752	35.544	43.951	0.734	15.6	-11.83	-1.892	-54.53	1.506	446.8
500	10.096	34.781	5.57	10.037	26.775	35.587	44.013	0.803	18.9	-9.19	-1.343	-46.90	1.397	496.4
600	9.430	34.696	5.44	9.362	26.822	35.664	44.118	0.939	26.6	-6.68	-0.823	-40.81	1.303	595.5
700	8.869	34.624	5.42	8.792	26.857	35.726	44.203	1.073	35.4	-6.25	-0.662	-42.05	1.323	694.6
800	8.044	34.556	4.98	7.960	26.931	35.837	44.351	1.203	45.3	-14.08	-0.935	-119.44	2.229	793.6
900	6.301	34.446	4.60	6.218	27.087	36.076	44.668	1.321	55.6	-17.58	-0.992	-142.22	2.432	892.5
1000	4.836	34.389	4.45	4.754	27.219	36.281	44.941	1.423	65.5	-10.15	-0.085	-101.74	2.057	991.4
1200	3.762	34.451	3.94	3.672	27.383	36.499	45.210	1.598	85.0	-3.46	0.509	-64.61	1.640	1189.0
1400	3.287	34.546	3.58	3.184	27.506	36.647	45.380	1.744	104.4	-2.34	0.370	-45.17	1.371	1386.4
1600	2.959	34.609	3.54	2.843	27.587	36.745	45.494	1.872	123.9	-1.28	0.295	-45.17	0.000	1583.6
1619	2.952	34.611	3.52	2.835	27.590	36.748	45.498	1.883	125.8	-1.31	0.272	-45.17	0.000	1602.3

BOTL NO.	PRES DBAR	CTD TMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	2.4	19.457	19.457	24.608	33.079	41.186	34.611	35.995	5.37	2.01	0.14	0.10	0.00			2	222222255
23	32.0	17.757	17.752	26.042	34.552	42.694	35.924	35.941	5.56	1.85	0.15	0.20	0.00			32	222222255
22	63.2	17.235	17.224	26.167	34.694	42.852	35.919	35.891	5.59	1.68	0.15	0.20	0.00			62	222222255
21	92.5	16.385	16.370	26.289	34.846	43.033	35.814	35.802	5.61	1.51	0.19	0.30	0.00			91	222222255
20	122.3	15.993	15.973	26.390	34.961	43.160	35.826	35.783	5.49	1.68	0.22	0.90	0.00			121	222222255
19	151.5	15.320	15.296	26.447	35.043	43.266	35.700	35.647	5.41	1.68	0.30	2.30	0.00			150	222222255
18	201.4	14.169	14.140	26.526	35.167	43.432	35.476	35.438	5.39	1.68	0.43	4.70	0.00			199	222222255
17	250.7	13.202	13.167	26.622	35.301	43.601	35.338	35.318	5.38	2.18	0.53	6.50	0.00			248	222222255
16	301.1	12.323	12.283	26.662	35.377	43.712	35.163	35.152	5.51	2.51	0.65	8.60	0.00			298	222222255
15	351.2	11.698	11.653	26.700	35.442	43.801	35.057	35.043	5.62	2.68	0.73	9.80	0.00			348	222222255
14	402.0	11.087	11.036	26.734	35.502	43.886	34.954	34.941	5.65	3.01	0.83	11.40	0.00			398	222222255
13	499.9	10.191	10.132	26.760	35.568	43.989	34.782	34.796	5.64	3.86	1.00	14.10	0.00			495	222222255
12	600.0	9.508	9.439	26.811	35.649	44.100	34.698	34.704	5.49	4.69	1.15	16.80	0.00			594	222222255
11	699.8	8.875	8.798	26.857	35.725	44.202	34.625	34.623	5.44	5.87	1.29	19.30	0.00			693	222222255
10	799.3	7.969	7.886	26.942	35.852	44.369	34.556	34.551	4.88	11.06	1.57	23.90	0.00			791	222222255
9	900.8	6.293	6.210	27.088	36.078	44.669	34.446	34.446	4.56	21.62	1.94	29.50	0.00			891	222222255
8	1000.0	4.827	4.745	27.220	36.282	44.942	34.389	34.393	4.48	34.52	2.19	32.90	0.00			989	222222255
7	1098.0	4.211	4.125	27.299	36.393	45.082	34.404	34.407	4.22	45.92	2.32	34.70	0.00			1086	222222255
6	1198.2	3.747	3.657	27.384	36.501	45.213	34.451	34.450	3.91	59.16	2.43	36.80	0.00			1185	222222255
5	1299.2	3.491	3.395	27.455	36.585	45.309	34.508	34.521	3.62	71.89	2.54	37.60	0.00			1285	222222255
4	1398.8	3.259	3.157	27.508	36.650	45.385	34.546	34.550	3.54	77.58	2.55	37.70	0.00			1383	222222255
3	1499.5	3.078	2.969	27.552	36.703	45.447	34.579	34.580	3.55	81.93	2.52	37.60	0.00			1482	222222255
2	1603.3	2.956	2.840	27.588	36.745	45.495	34.609	34.613	3.54	86.12	2.52	37.30	0.00			1584	222222255
1	1617.3	2.952	2.835	27.590	36.748	45.497	34.611	34.611	3.55	85.61	2.52	37.10	0.00			1598	222222255

CRUISE: CD 29 STA: 80 DATE {D/M/Y}: 9-12-87 TIME: 0451 LAT: 31 59.88 S LONG: 99 0.12 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77280E-04 I/S SOUND SPEED= 1495.8 M/S Depth= 2089 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.308	35.992	5.12	19.308	25.701	34.161	42.255	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.308	35.992	5.12	19.307	25.701	34.161	42.255	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	17.947	35.959	5.48	17.944	26.022	34.524	42.660	0.044	0.0	-37.73	-0.132	-700.67	5.399	19.9
30	17.743	35.956	5.50	17.737	26.071	34.580	42.722	0.063	0.1	-15.04	-0.219	-267.48	3.336	29.8
40	17.642	35.962	5.49	17.635	26.100	34.613	42.758	0.082	0.2	-5.00	0.409	-134.82	2.368	39.8
50	17.574	35.963	5.47	17.565	26.118	34.633	42.780	0.101	0.2	-7.64	-0.202	-129.92	2.325	49.7
100	16.597	35.876	5.52	16.580	26.287	34.837	43.016	0.194	1.0	-14.47	-0.905	-208.39	2.945	99.4
125	16.438	35.867	5.50	16.418	26.319	34.873	43.058	0.237	1.5	-4.81	-0.456	-60.47	1.586	124.2
150	16.328	35.854	5.43	16.304	26.335	34.894	43.082	0.281	2.1	-5.35	-0.919	-41.58	1.315	149.1
200	15.859	35.757	5.49	15.828	26.371	34.947	43.152	0.367	3.6	-15.65	-3.127	-92.03	1.957	198.7
250	14.622	35.523	5.39	14.585	26.467	35.091	43.340	0.451	5.5	-24.52	-3.932	-162.00	2.758	248.4
300	13.769	35.400	5.36	13.726	26.555	35.212	43.492	0.531	7.8	-12.77	-1.838	-99.49	2.035	298.0
350	13.075	35.281	5.44	12.978	26.616	35.303	43.511	0.608	10.3	-15.73	-2.676	-90.71	1.943	347.6
400	12.110	35.117	5.49	12.057	26.669	35.394	43.738	0.682	13.2	-14.25	-2.475	-71.28	1.722	397.2
450	11.545	35.022	5.59	11.487	26.703	35.452	43.819	0.755	16.3	-14.01	-2.465	-61.87	1.604	446.8
500	10.841	34.897	5.57	10.779	26.736	35.515	43.910	0.827	19.8	-9.63	-1.650	-41.35	1.312	496.4
600	9.874	34.747	5.51	9.804	26.788	35.611	44.046	0.968	27.7	-8.97	-1.210	-52.46	1.477	595.5
700	9.262	34.672	5.44	9.182	26.832	35.682	44.144	1.104	36.8	-6.41	-0.790	-39.29	1.279	694.6
800	8.669	34.602	5.33	8.581	26.873	35.750	44.237	1.239	47.0	-6.84	-0.639	-50.80	1.454	793.6
900	7.567	34.521	4.83	7.475	26.975	35.804	44.438	1.367	58.2	-14.96	-0.941	-128.54	2.313	892.6
1000	5.783	34.421	4.52	5.694	27.134	36.149	44.764	1.482	69.3	-18.57	-0.797	-160.29	2.582	991.5
1200	3.904	34.424	4.10	3.812	27.347	36.457	45.161	1.668	90.0	-3.96	0.423	-65.25	1.648	1189.1
1400	3.422	34.509	3.72	3.318	27.464	36.598	45.325	1.823	110.6	-2.26	0.410	-46.95	1.398	1386.5
1600	3.054	34.585	3.56	2.937	27.560	36.713	45.458	1.959	131.3	-1.73	0.337	-37.38	1.247	1583.7
1800	2.793	34.643	3.60	2.662	27.630	36.797	45.555	2.079	152.2	-1.31	0.234	-27.19	1.064	1780.7
2000	2.558	34.683	3.70	2.413	27.684	36.864	45.633	2.189	173.4	-1.47	0.196	-26.79	1.056	1977.5
2105	2.398	34.703	3.78	2.247	27.714	36.902	45.680	2.242	184.6	-1.82	0.209	-26.79	0.000	2080.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	8.4	18.877	18.875	25.811	34.284	42.391	35.990	35.984	5.44	1.72	0.10	0.00	0.00	2.265	1.246	8	222222222
23	31.9	17.716	17.711	26.077	34.587	42.730	35.956	35.960	5.53	1.72	0.10	0.00	0.00	2.209	1.265	31	222222222
22	62.3	17.514	17.503	26.131	34.648	42.797	35.960	35.961	5.53	1.73	0.10	0.00	0.00	2.577	1.845	61	222222222
21	92.6	16.873	16.858	26.226	34.766	42.936	35.882	35.893	5.59	1.00	0.12	0.00	0.00	2.281	1.204	91	222222222
20	121.5	16.502	16.483	26.305	34.858	43.040	35.869	35.874	5.57	1.40	0.13	0.00	0.00	2.379	1.045	120	222222222
19	152.3	16.356	16.331	26.327	34.885	43.073	35.852	35.858	5.49	1.40	0.15	0.30	0.00	2.226	1.227	151	222222222
18	201.7	15.878	15.848	26.363	34.939	43.143	35.753	35.759	5.48	1.41	0.18	0.90	0.00	2.302	1.415	200	222222222
17	251.2	14.455	14.418	26.496	35.126	43.381	35.514	35.508	5.37	1.58	0.37	3.50	0.00	2.383	1.290	249	222222222
16	302.6	13.695	13.651	26.568	35.228	43.510	35.397	35.391	5.37	1.75	0.45	5.20	0.00	2.134	1.160	300	222222222
15	351.6	12.810	12.762	26.658	35.353	43.669	35.279	35.243	5.48	1.92	0.55	7.00	0.00	2.442	1.284	348	222222222
14	400.3	11.908	11.856	26.787	35.440	43.791	35.116	35.089	5.59	2.26	0.67	8.90	0.00	2.338	1.251	396	222222222
13	500.0	10.709	10.648	26.760	35.545	43.945	34.898	34.871	5.63	3.28	0.87	12.30	0.00	2.437	1.332	495	222222222
12	600.2	9.750	9.680	26.800	35.636	44.076	34.746	34.730	5.54	4.12	1.04	15.60	0.00	2.249	1.205	594	222222222
11	700.4	9.118	9.040	26.854	35.711	44.178	34.671	34.653	5.48	4.96	1.22	17.90	0.00	1.955	1.033	693	222222222
10	798.9	8.626	8.539	26.880	35.759	44.248	34.602	34.595	5.33	6.64	1.35	20.20	0.00	1.630	0.886	791	222222222
9	900.0	7.414	7.323	26.996	35.932	44.474	34.521	34.509	4.72	14.71	1.69	25.60	0.00	0.693	0.383	891	222222222
8	999.8	5.669	5.581	27.148	36.169	44.789	34.422	34.415	4.51	26.47	2.04	30.30	0.00	0.318	0.189	989	222222222
7	1199.1	3.964	3.872	27.341	36.448	45.149	34.424	34.421	4.14	51.48	2.36	34.60	0.00	0.119	0.065	1186	222222222
6	1400.6	3.399	3.296	27.466	36.602	45.330	34.510	34.517	3.65	71.64	2.50	36.30	0.00			1385	222222255
5	1600.5	3.061	2.944	27.559	36.712	45.456	34.585	34.584	3.59	81.72	2.50	36.30	0.00	0.001	0.000	1582	222222222
4	1800.2	2.779	2.648	27.632	36.799	45.558	34.643	34.645	3.62	90.63	2.47	35.70	0.00			1778	222222255
3	1949.4	2.622	2.481	27.669	36.846	45.612	34.672	34.674	3.71	94.50	2.43	35.40	0.00	0.001	0.000	1925	222222222
2	2104.6	2.391	2.240	27.714	36.903	45.682	34.703	34.704	3.83	99.21	2.38	34.80	0.00			2078	222222255
1	2104.2	2.394	2.242	27.714	36.903	45.681	34.703	34.706	3.83	99.05	2.38	34.80	0.00	0.005	0.000	2077	222222222

CRUISE: CD 29 STA: 81 DATE (D/M/Y): 9-12-87 TIME: 1102 LAT: 31 59.61 S LONG: 99 58.56 E

GRAVITY= 9.7948 M/S CORIOLIS= -.77270E-04 1/S SOUND SPEED= 1493.5 M/S Depth= 2407 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.179	35.613	4.61	18.179	25.698	34.198	42.331	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.179	35.613	4.61	18.179	25.698	34.198	42.331	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	17.655	35.548	5.65	17.651	25.779	34.296	42.446	3.045	0.0	-53.54	0.470	-1006.16	6.471	19.9
30	16.634	35.508	5.68	16.629	25.993	34.545	42.727	0.066	0.1	-43.54	-0.658	-739.74	5.548	29.8
40	16.592	35.555	5.69	16.586	26.039	34.592	42.775	0.086	0.2	-3.57	4.005	-296.37	3.512	39.8
50	16.121	35.493	5.79	16.113	26.102	34.672	42.871	0.105	0.3	-57.10	-6.064	-646.92	5.188	49.7
100	14.458	35.401	5.60	14.443	26.403	35.034	43.289	0.193	0.9	-19.47	-1.509	-233.12	3.115	99.4
125	14.123	35.385	5.54	14.105	26.463	35.106	43.374	0.233	1.4	-11.69	-0.621	-159.08	2.573	124.2
150	13.946	35.384	5.36	13.924	26.500	35.150	43.424	0.273	1.9	-21.00	-2.659	-167.78	2.642	149.1
200	12.520	35.156	5.40	12.493	26.615	35.323	43.650	0.349	3.3	-19.69	-3.075	-119.95	2.234	198.7
250	11.874	35.050	5.44	11.842	26.659	35.393	43.746	0.421	5.0	-12.00	-1.916	-64.19	1.634	248.4
300	11.244	34.952	5.51	11.207	26.701	35.462	43.840	0.492	7.0	-10.03	-1.604	-49.89	1.441	298.0
350	10.954	34.909	5.50	10.911	26.721	35.495	43.885	0.563	9.3	-6.92	-0.966	-41.23	1.310	347.6
400	10.663	34.867	5.51	10.614	26.742	35.529	43.930	0.632	11.9	-5.88	-0.823	-33.95	1.189	397.2
450	10.367	34.825	5.48	10.313	26.762	35.562	43.976	0.702	14.9	-6.53	-0.883	-38.54	1.266	446.8
500	10.028	34.780	5.45	9.969	26.786	35.601	44.029	0.770	18.3	-5.60	-0.721	-34.27	1.194	496.4
600	9.436	34.703	5.40	9.368	26.827	35.668	44.122	0.906	25.9	-7.14	-0.875	-43.81	1.350	595.5
700	8.742	34.627	5.20	8.685	26.879	35.753	44.236	1.038	34.7	-8.97	-0.865	-64.54	1.639	694.5
800	7.628	34.532	4.78	7.545	26.974	35.899	44.431	1.165	44.3	-14.95	-1.056	-118.93	2.225	793.5
900	6.046	34.435	4.52	5.965	27.111	36.112	44.715	1.278	54.2	-12.65	-0.680	-102.00	2.060	892.5
1000	4.959	34.396	4.43	4.876	27.210	36.266	44.920	1.380	64.0	-11.25	-0.109	-111.73	2.156	991.4
1200	3.741	34.454	3.92	3.651	27.387	36.505	45.215	1.553	83.4	-2.50	0.504	-54.96	1.512	1189.0
1400	3.369	34.542	3.55	3.266	27.495	36.631	45.361	1.701	103.0	-2.12	0.318	-40.10	1.292	1386.4
1600	3.060	34.601	3.52	2.943	27.572	36.725	45.469	1.833	123.1	-1.94	0.320	-38.34	1.263	1583.5
1800	2.715	34.664	3.59	2.585	27.654	36.824	45.586	1.949	143.2	-1.39	0.192	-25.44	1.029	1780.5
2000	2.476	34.698	3.79	2.332	27.703	36.886	45.660	2.054	163.6	-1.00	0.148	-19.16	0.893	1977.3
2200	2.308	34.715	4.00	2.149	27.732	36.925	45.708	2.152	184.5	-0.82	0.067	-12.54	0.722	2173.9
2400	2.034	34.732	4.10	1.862	27.768	36.977	45.774	2.245	206.3	-2.10	0.090	-12.54	0.000	2370.4
2423	1.984	34.733	4.11	1.811	27.773	36.985	45.785	2.255	208.8	-2.16	0.084	-12.54	0.000	2392.9

BOTL	PRES	CTD	TMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS		
19	3.0	18.127	18.126	25.711	34.213	42.347	35.613	35.566	5.50	1.19	0.22	0.20	0.00				2	222222255
18	103.8	14.532	14.517	26.387	35.015	43.267	35.400	35.402	5.58	1.36		2.30	0.00				102	222252255
17	201.7	12.786	12.759	26.560	35.257	43.574	35.152	35.206	5.38	2.37	0.65	8.10	0.00				200	222222255
16	301.6	11.446	11.408	26.662	35.415	43.785	34.949	34.979	5.54	3.39	0.83	11.00	0.00				299	222222255
15	401.8	10.749	10.699	26.726	35.510	43.908	34.867	34.875	5.50	3.89	0.95	12.90	0.00				398	222222255
14	500.6	10.111	10.051	26.771	35.583	44.008	34.779	34.801	5.49	4.06	1.05	14.80	0.00				496	222222255
13	601.3	9.476	9.407	26.820	35.660	44.112	34.703	34.705	5.39	4.74	1.19	16.90	0.00				595	222222255
12	700.7	8.832	8.755	26.862	35.732	44.212	34.623	34.638	5.18	6.94	1.38	19.70	0.00				694	222222255
11	801.5	7.723	7.641	26.959	35.881	44.408	34.532	34.539	4.76	12.54	1.67	24.40	0.00				793	222222255
10	900.8	6.162	6.080	27.095	36.091	44.689	34.434	34.440	4.53	22.71	1.98	29.00	0.00				891	222222255
9	998.2	4.971	4.888	27.209	36.284	44.918	34.396	34.392	4.43	33.39	2.20	31.80	0.00				988	222222255
8	1100.4	4.185	4.100	27.307	36.402	45.093	34.411	34.409	4.22	46.45	2.39	33.90	0.00				1089	222222255
7	1299.8	3.598	3.501	27.443	36.568	45.286	34.506	34.511	3.59	70.55	2.57	36.10	0.00				1285	222222255
6	1499.0	3.181	3.072	27.534	36.680	45.418	34.568	34.575	3.49	81.60	2.60	36.40	0.00				1482	222222255
5	1699.2	2.822	2.700	27.623	36.788	45.544	34.638	34.638	3.59	89.25	2.56	35.90	0.00				1679	222222255
4	1900.5	2.576	2.439	27.678	36.856	45.625	34.678	34.672	3.80	90.97	2.48	35.00	0.00				1877	222222255
3	2100.3	2.382	2.230	27.720	36.909	45.688	34.709	34.706	3.83	99.15	2.46	34.70	0.00				2073	222222255
2	2300.1	2.221	2.054	27.745	36.944	45.732	34.723	34.728	4.03	98.67	2.40	34.00	0.00				2270	222222255
1	2421.2	1.985	1.811	27.773	36.985	45.785	34.734	34.734	4.13	104.31	2.38	33.80	0.00				2388	222222255

CRUISE: CD 29 STA: 82 DATE (D/M/Y) 9-12-87 TIME 1822 LAT 31 59 34 S LONG 100 59 48 E

GRAVITY= 9.7948 1/S CORIOLIS= - 77282E-04 1/S SOUND SPEED= 1493.0 M/S Depth= 2228 Cor Meters

PRES	TMP	SALT	OTG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m/s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.440	35.736	5.36	18.440	25.727	34.217	42.340	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.440	35.736	5.36	18.440	25.727	34.217	42.340	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	16.982	35.583	5.72	16.978	25.968	34.508	42.678	0.044	0.0	-111.83	-11.290	-1352.48	7.501	19.9
30	16.090	35.498	5.84	16.086	26.112	34.683	42.883	0.063	0.1	-30.76	-5.036	-245.51	3.196	29.8
40	15.994	35.485	5.86	15.987	26.124	34.699	42.902	0.082	0.2	-7.33	-0.121	-120.73	2.241	39.8
50	15.857	35.508	5.82	15.849	26.174	34.753	42.960	0.101	0.2	1.86	5.567	-291.90	3.485	49.7
100	14.892	35.553	5.54	14.877	26.426	35.039	43.278	0.187	0.9	-17.94	-2.207	-173.35	2.686	99.4
125	14.587	35.509	5.59	14.569	26.459	35.084	43.334	0.227	1.4	-19.32	-2.966	-144.85	2.455	124.2
150	13.984	35.411	5.50	13.962	26.514	35.162	43.434	0.267	1.9	-26.30	-3.925	-189.92	2.811	149.1
200	12.761	35.217	5.52	12.734	26.615	35.312	43.630	0.342	3.3	-18.53	-2.993	-109.94	2.139	198.7
250	12.137	35.126	5.51	12.104	26.667	35.390	43.732	0.415	4.9	-12.28	-2.009	-64.91	1.643	248.4
300	11.551	35.023	5.57	11.513	26.700	35.448	43.813	0.486	6.9	-9.31	-1.588	-42.18	1.325	298.0
350	11.090	34.946	5.61	11.050	26.725	35.493	43.876	0.556	9.2	-8.54	-1.299	-45.65	1.378	347.6
400	10.709	34.883	5.60	10.660	26.746	35.531	43.930	0.625	11.9	-10.75	-1.779	-46.09	1.385	397.2
450	10.270	34.809	5.60	10.216	26.766	35.570	43.988	0.694	14.9	-6.35	-0.984	-29.49	1.108	446.8
500	9.973	34.764	5.58	9.915	26.783	35.600	44.031	0.763	18.2	-7.36	-0.986	-42.01	1.322	496.3
600	9.288	34.678	5.45	9.220	26.830	35.679	44.139	0.898	25.8	-6.70	-0.811	-41.11	1.308	595.5
700	8.690	34.606	5.33	8.614	26.871	35.747	44.233	1.030	34.6	-8.17	-0.778	-50.73	1.563	694.5
800	7.572	34.523	4.82	7.491	26.974	35.902	44.436	1.157	44.2	-15.49	-0.981	-129.66	2.323	793.5
900	5.911	34.423	4.56	5.831	27.119	36.127	44.736	1.270	54.1	-13.39	-0.656	-100.87	2.128	892.5
1000	4.672	34.389	4.42	4.591	27.237	36.307	44.975	1.370	63.7	-9.65	0.055	-101.83	2.058	991.4
1200	3.745	34.456	3.91	3.654	27.389	36.506	45.217	1.539	82.7	-2.00	0.410	-51.90	1.470	1182.8
1400	3.320	34.530	3.61	3.217	27.490	36.629	45.361	1.687	102.2	-1.95	0.354	-40.35	1.296	1386.3
1600	2.967	34.598	3.61	2.851	27.578	36.735	45.484	1.818	122.2	-1.44	0.341	-34.66	1.201	1583.5
1800	2.725	34.649	3.67	2.595	27.641	36.811	45.572	1.935	142.4	-1.33	0.221	-26.53	1.051	1780.5
2000	2.443	34.696	3.83	2.300	27.704	36.890	45.665	2.041	163.0	-1.41	0.177	-25.05	1.021	1977.3
2200	2.206	34.722	4.00	2.049	27.745	36.944	45.732	2.137	183.7	-1.36	0.116	-25.05	0.000	2173.9
2235	2.167	34.725	4.08	2.007	27.751	36.952	45.742	2.154	187.3	-1.36	0.121	-25.05	0.000	2208.3

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
18	11.3	18.110	18.108	25.823	34.323	42.456	35.752	35.736	5.61	1.33	0.19	0.30	0.00	2.218	1.419	11	222222222
17	104.0	14.556	14.541	26.495	35.120	43.370	35.547	35.500	5.58	1.36	0.35	2.50	0.00	2.423	1.322	103	222222222
16	199.4	12.280	12.253	26.705	35.421	43.756	35.211	35.137	5.50	2.23	0.65	8.40	0.00	2.563	1.393	197	222222222
15	304.5	11.245	11.207	26.753	35.513	43.890	35.019	34.966	5.66	2.93	0.80	10.80	0.00	2.570	1.381	301	222222222
14	399.9	10.471	10.422	26.790	35.585	43.994	34.886	34.837	5.64	3.64	0.93	12.60	0.00	2.450	1.353	396	222222222
13	500.7	9.796	9.738	26.812	35.637	44.074	34.763	34.736	5.56	4.35	1.07	14.80	0.00	2.240	1.248	496	222222222
12	600.6	9.147	9.080	26.854	35.708	44.174	34.678	34.657	5.45	5.22	1.21	17.30	0.00	2.022	1.072	595	222222222
11	698.7	8.553	8.478	26.894	35.776	44.267	34.608	34.588	5.30	7.26	1.38	19.70	0.00	1.565	0.909	692	222222222
10	798.5	7.381	7.301	27.002	35.939	44.481	34.524	34.507	4.71	14.67	1.70	24.90	0.00	0.610	0.420	790	222222222
9	901.3	5.958	5.877	27.112	36.118	44.725	34.423	34.424	4.57	23.75	2.00	28.70	0.00	0.382	0.225	892	222222222
8	1002.2	4.701	4.620	27.234	36.303	44.969	34.389	34.388	4.45	36.01	2.22	31.40	0.00	0.158	0.141	992	222222222
7	1100.9	4.018	4.014	27.331	36.434	45.132	34.419		4.14					0.097	0.055	1089	252555522
6	1298.4	3.489	3.393	27.448	36.579	45.302	34.499	34.499	3.70	68.21	2.51	33.30	0.00	0.023	0.000	1264	222222222
5	1503.3	3.135	3.026	27.536	36.684	45.425	34.565	34.566	3.60	78.31	2.52	35.60	0.00			1486	222222255
4	1698.5	2.846	2.724	27.614	36.77	45.533	34.629	34.633	3.60	87.57	2.51	35.00	0.00			1678	222222255
3	1899.1	2.581	2.444	27.674	36.8	45.621	34.674	34.676	3.75	92.31	2.44	34.30	0.00			1876	222222255
2	2100.3	2.323	2.173	27.725	36.917	45.699	34.709	34.711	3.93	97.71	2.38	33.60	0.00			2073	222222255
1	2234.0	2.167	2.007	27.751	36.952	45.742	34.725	34.726	4.17	95.24	2.30	32.80	0.00	0.001	0.000	2205	222222222

CRUISE: CD 29 STA: 83 DATE (D/M/Y): 10-12-87 TIME: 0036 LAT: 32 14 54 S LONG: 101 49.73 E

GRAVITY= 9.7950 M/S CORIOLIS= -.77807E-04 1/S SOUND SPEED= 1494.4 M/S Depth= 2842 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.157	35.873	5.19	18.157	25.903	34.400	42.530	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.157	35.873	5.19	18.156	25.903	34.400	42.530	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.134	35.872	5.42	18.131	25.909	34.407	42.538	0.042	0.0	-43.07	0.097	-820.49	5.823	19.9
30	17.263	35.815	5.42	17.258	26.079	34.606	42.765	0.062	0.1	-44.48	-0.092	-816.99	5.811	29.8
40	17.078	35.829	5.53	17.071	26.135	34.668	42.832	0.081	0.2	-10.64	0.073	-199.24	2.869	39.8
50	17.030	35.841	5.56	17.022	26.155	34.690	42.856	0.100	0.2	-2.68	1.104	-113.69	2.168	49.7
100	15.346	35.642	5.51	15.331	26.394	34.990	43.212	0.189	0.9	-28.38	-2.900	-315.69	3.612	99.4
125	14.537	35.499	5.44	14.518	26.463	35.090	43.341	0.230	1.4	-38.59	-7.040	-229.54	3.080	124.2
150	13.780	35.333	5.60	13.678	26.512	35.172	43.455	0.269	1.9	-11.60	-1.006	-113.96	2.170	149.1
200	12.999	35.267	5.43	12.971	26.606	35.294	43.602	0.345	3.3	-17.39	-2.503	-123.14	2.256	198.7
250	12.210	35.139	5.51	12.177	26.663	35.383	43.722	0.417	5.0	-14.95	-2.514	-76.82	1.782	248.4
300	11.535	35.022	5.55	11.497	26.702	35.451	43.817	0.488	6.9	-11.78	-1.999	-53.92	1.493	298.0
350	10.894	34.914	5.60	10.851	26.736	35.512	43.904	0.558	9.3	-11.20	-1.849	-49.58	1.431	347.6
400	10.397	34.832	5.60	10.349	26.761	35.559	43.972	0.627	11.9	-8.46	-1.330	-38.60	1.263	397.2
450	9.992	34.769	5.59	9.939	26.782	35.599	44.028	0.695	14.8	-8.45	-1.195	-44.64	1.358	446.8
500	9.677	34.729	5.49	9.620	26.805	35.636	44.078	0.762	18.1	-5.15	-0.568	-35.79	1.216	496.3
600	9.133	34.661	5.42	9.066	26.842	35.698	44.164	0.896	25.6	-4.81	-0.584	-28.34	1.082	595.5
700	8.473	34.588	5.23	8.398	26.890	35.776	44.271	1.027	34.3	-9.18	-0.789	-70.50	1.707	694.5
800	7.427	34.514	4.75	7.347	26.987	35.922	44.463	1.151	43.8	-13.20	-0.808	-111.30	2.145	793.5
900	5.944	34.426	4.56	5.863	27.116	36.123	44.731	1.264	53.6	-13.19	-0.665	-107.16	2.104	892.5
1000	4.711	34.381	4.49	4.630	27.227	36.295	44.960	1.364	63.3	-9.90	-0.808	-102.84	2.062	991.3
1200	3.648	34.455	3.93	3.559	27.397	36.519	45.235	1.535	82.3	-3.73	0.438	-63.00	1.615	1188.9
1400	3.231	34.549	3.61	3.129	27.513	36.656	45.392	1.678	101.3	-1.73	0.382	-39.88	1.284	1386.3
1600	2.881	34.616	3.61	2.766	27.599	36.761	45.514	1.804	120.6	-1.51	0.302	-33.22	1.172	1583.5
1800	2.608	34.669	3.74	2.479	27.667	36.844	45.610	1.916	140.0	-1.32	0.232	-27.30	1.062	1780.5
2000	2.401	34.702	3.88	2.258	27.712	36.900	45.677	2.018	159.8	-1.14	0.132	-19.71	0.902	1977.3
2200	2.199	34.722	4.03	2.042	27.746	36.945	45.733	2.113	180.1	-1.03	0.077	-15.43	0.798	2173.9
2400	2.033	34.732	4.19	1.861	27.768	36.977	45.775	2.204	201.2	-1.00	0.056	-14.05	0.762	2370.3
2600	1.885	34.741	4.41	1.697	27.788	37.006	45.812	2.289	223.1	-0.89	0.007	-10.16	0.648	2566.5
2800	1.693	34.740	4.51	1.491	27.802	37.032	45.849	2.372	245.8	-0.80	-0.008	-10.16	0.000	2762.6
2873	1.555	34.740	4.53	1.447	27.805	37.037	45.856	2.401	254.4	-0.62	-0.006	-10.16	0.000	2834.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	2.2	18.254	18.254	25.011	33.519	41.660	34.740	35.872	5.48	1.21	0.20	0.10	0.00			2	222222255
23	103.3	15.160	15.144	26.431	35.033	43.262	35.636	35.614	5.54	0.87	0.31	1.70	0.00			102	222222255
22	203.4	13.056	13.028	26.587	35.272	43.579	35.257	35.269	5.39	1.72	0.59	6.70	0.00			201	222222255
21	303.0	11.372	11.333	26.729	35.484	43.856	35.018	35.002	5.54	2.22	0.82	10.10	0.00			300	222222255
20	401.2	10.338	10.282	26.770	35.572	43.987	34.829	34.817	5.63	3.40	1.00	13.50	0.00			397	222222255
19	501.9	9.578	9.521	26.821	35.656	44.102	34.728	34.716	5.48	3.90	1.16	15.90	0.00			497	222222255
18	602.0	9.103	9.036	26.847	35.704	44.171	34.660	34.653	5.42	4.57	1.26	17.50	0.00			596	222222255
17	700.4	8.455	8.380	26.892	35.779	44.275	34.587	34.584	5.22	7.07	1.43	20.70	0.00			693	222222255
16	890.7	7.319	7.240	27.002	35.942	44.487	34.513	34.503	4.70	14.60	1.75	25.40	0.00			793	222222255
15	900.8	5.775	5.696	27.136	36.151	44.766	34.425	34.412	4.55	24.45	2.05	29.40	0.00			891	222222255
14	1003.1	4.562	4.482	27.243	36.319	44.991	34.381	34.377	4.48	35.14	2.25	32.00	0.00			993	222222255
13	1100.5	4.090	4.006	27.320	36.420	45.113	34.415	34.411	4.15	48.34	2.39	33.70	0.00			1039	222222255
12	1198.9	3.637	3.548	27.398	36.521	45.238	34.455	34.450	3.91	58.06	2.53	34.90	0.00			1186	222222255
11	1398.5	3.222	3.121	27.513	36.657	45.393	34.548	34.546	3.57	76.06	2.50	35.80	0.00			1383	222222255
10	1600.5	2.890	2.775	27.599	36.760	45.513	34.616	34.610	3.60	84.09	2.54	35.10	0.00			1582	222222255
9	1800.9	2.605	2.477	27.668	36.844	45.611	34.670	34.666	3.75	90.11	2.46	34.60	0.00			1779	222222255
8	2001.6	2.407	2.264	27.712	36.899	45.676	34.702	34.701	3.90	93.29	2.40	34.00	0.00			1976	222222255
7	2200.9	2.217	2.059	27.744	36.943	45.730	34.722	34.721	4.03	97.64	2.37	33.70	0.00			2172	222222255
6	2400.9	2.038	1.866	27.768	36.977	45.774	34.733	34.732	4.18	98.98	2.33	32.70	0.00			2368	222222255
5	2601.9	1.877	1.689	27.788	37.007	45.813	34.741	34.741	4.40	97.32	2.25	31.80	0.00			2566	222222255
4	2601.9	1.877	1.689	27.788	37.007	45.813	34.741	34.739	4.41	97.16	2.26	31.90	0.00			2566	222222255
3	2801.2	1.687	1.485	27.803	37.033	45.850	34.740	34.737	4.50	101.60	2.25	32.00	0.00			2761	222222255
2	2801.2	1.687	1.485	27.803	37.033	45.850	34.740	34.737	4.51	101.85	2.25	32.10	0.00			2761	222222255
1	2871.4	1.652	1.443	27.806	37.036	45.857	34.740	34.737	4.51	102.54	2.25	0.00	0.00			2830	222222255

CRUISE: CD 29 STA: 84 DATE (D/M/Y): 10-12-87 TIME: 0429 LAT 32 20.11 S LONG 102 0.03 E

GRAVITY= 9.7951 M/S CORIOLIS= - 78007E-04 1/S SOUND SPEED= 1498.3 M/S Depth= 3740 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	I/DB 10-3	(m s)-1 10-12	CPH	METERS
0	17.949	35.675	4.80	17.949	25.803	34.309	42.448	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.949	35.675	4.80	17.949	25.803	34.309	42.448	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.135	35.687	5.76	17.131	26.011	34.544	42.708	0.042	0.0	-82.89	-1.324	-1440.08	7.705	19.9
30	16.539	35.667	5.80	16.534	26.138	34.691	42.874	0.062	0.1	-12.94	0.424	-257.56	3.258	29.8
40	16.520	35.686	5.80	16.514	26.157	34.711	42.895	0.080	0.2	-5.25	1.210	-165.39	2.611	39.8
50	16.375	35.681	5.75	16.367	26.187	34.746	42.934	0.099	0.2	-23.10	0.011	-413.13	4.127	49.7
100	14.962	35.567	5.59	14.947	26.422	35.032	43.268	0.184	0.9	-26.88	-4.441	-194.14	2.829	99.4
125	14.343	35.456	5.49	14.325	26.471	35.106	43.364	0.224	1.4	-25.41	-4.595	-147.66	2.467	124.2
150	13.752	35.351	5.42	13.731	26.516	35.173	43.454	0.264	1.9	-19.43	-3.130	-133.65	2.347	149.1
200	12.988	35.250	5.35	12.960	26.595	35.283	43.592	0.340	3.3	-14.18	-1.819	-115.22	2.179	198.7
250	12.366	35.149	5.37	12.273	26.653	35.369	43.704	0.413	4.9	-16.78	-2.812	-89.63	1.911	248.4
300	11.536	35.019	5.56	11.497	26.699	35.448	43.814	0.485	7.0	-13.18	-2.270	-59.19	1.562	298.0
350	10.998	34.926	5.64	10.955	26.727	35.499	43.886	0.555	9.3	-7.60	-1.198	-38.06	1.252	347.6
400	10.635	34.868	5.66	10.586	26.747	35.535	43.938	0.624	11.9	-8.67	-1.382	-40.27	1.288	397.2
450	10.177	34.796	5.68	10.123	26.772	35.580	44.002	0.693	14.9	-8.84	-1.332	-43.51	1.339	446.8
500	9.797	34.741	5.59	9.739	26.794	35.620	44.058	0.761	18.2	-7.22	-0.999	-44.24	1.350	496.3
600	9.148	34.662	5.53	9.081	26.841	35.696	44.161	0.895	25.7	-6.51	-0.776	-40.11	1.286	595.5
700	8.412	34.587	5.21	8.337	26.899	35.788	44.285	1.026	34.4	-8.93	-0.662	-75.31	1.762	694.5
800	7.485	34.515	4.77	7.325	26.992	35.928	44.469	1.150	43.9	-13.01	-0.878	-105.53	2.086	793.5
900	5.783	34.417	4.59	5.704	27.129	36.144	44.759	1.263	53.6	-16.46	-0.815	-135.00	2.359	892.5
1000	4.700	34.383	4.49	4.619	27.229	36.298	44.964	1.362	63.2	-7.97	-0.036	-80.38	1.819	991.3
1200	3.721	34.441	4.05	3.631	27.379	36.438	45.211	1.534	82.5	-3.12	0.449	-58.03	1.547	1188.9
1400	3.284	34.527	3.71	3.182	27.491	36.632	45.365	1.682	102.0	-2.06	0.393	-44.07	1.348	1386.3
1600	2.891	34.609	3.65	2.776	27.593	36.754	45.507	1.810	121.7	-1.50	0.348	-35.96	1.217	1583.5
1800	2.651	34.662	3.74	2.522	27.657	36.832	45.596	1.924	141.4	-1.43	0.244	-29.08	1.095	1780.5
2000	2.418	34.700	3.94	2.275	27.709	36.896	45.672	2.027	161.4	-0.91	0.121	-16.67	0.829	1977.3
2200	2.260	34.720	4.12	2.101	27.740	36.936	45.721	2.124	182.1	-0.90	0.086	-14.66	0.777	2173.9
2400	2.068	34.735	4.26	1.895	27.767	36.975	45.770	2.216	203.5	-1.06	0.055	-14.76	0.780	2370.3
2600	1.899	34.742	4.43	1.711	27.787	37.004	45.810	2.302	225.7	-0.94	0.014	-11.25	0.681	2566.6
2800	1.722	34.742	4.50	1.519	27.801	37.029	45.844	2.386	248.6	-0.97	-0.011	-10.32	0.652	2762.6
3000	1.582	34.738	4.56	1.363	27.810	37.047	45.870	2.466	272.4	-0.83	-0.018	-8.54	0.593	2958.5
3200	1.439	34.734	4.63	1.204	27.818	37.064	45.896	2.545	297.2	-0.82	-0.025	-8.24	0.583	3154.2
3400	1.338	34.730	4.66	1.086	27.823	37.075	45.913	2.621	323.0	-0.69	-0.026	-6.70	0.525	3349.7
3600	1.223	34.725	4.70	0.953	27.827	37.087	45.933	2.696	349.7	-0.35	-0.014	-3.57	0.384	3545.0
3785	1.207	34.723	4.68	0.918	27.828	37.091	45.938	2.765	375.7	-0.16	-0.009	-3.57	0.000	3725.6

BOTL NO.	PRES DBAR	CTD IPTS68	THETA IPTS68	SIG-1H KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	15.9	17.072	17.069	26.023	34.558	42.724	35.683	35.699	5.69	1.99	0.23	0.20	0.00	2.307	1.340	15	22222222
23	102.5	14.794	14.779	26.444	35.060	43.302	35.548	35.545	5.59	1.98	0.34	2.30	0.00	2.320	1.309	101	22222222
22	201.7	12.978	12.951	26.598	35.286	43.596	35.251	35.253	5.45	2.65	0.58	7.10	0.00	2.375	1.363	200	22222222
21	300.3	11.436	11.398	26.716	35.469	43.839	35.017	35.003	5.62	3.15	0.79	10.30	0.00	2.509	1.400	297	22222222
20	401.0	10.580	10.531	26.756	35.546	43.951	34.867	34.853	5.67	4.16	0.96	12.70	0.00	2.489	1.370	397	22222222
19	501.2	9.819	9.760	26.790	35.615	44.051	34.740	34.738	5.57	4.50	1.11	15.20	0.00	2.319	1.337	496	22222222
18	599.5	9.238	9.170	26.827	35.678	44.140	34.663	34.667	5.47	5.34	1.26	17.70	0.00	2.012	1.115	594	22222222
17	801.0	7.543	7.462	26.971	35.901	44.436	34.514	34.521	4.73	14.61	1.74	25.20	0.00	0.718	0.439	793	22222222
16	899.6	5.867	5.787	27.119	36.129	44.740	34.417	34.418	4.58	24.73	2.05	29.50	0.00	0.395	0.245	890	22222222
15	999.7	4.681	4.600	27.231	36.301	44.968	34.383	34.379	4.51	35.19	2.25	31.90	0.00	0.241	0.156	989	22222222
14	1199.5	3.655	3.566	27.385	36.508	45.223	34.441	34.448	3.96	58.98	2.50	34.90	0.00	0.068	0.051	1186	22222222
13	1399.0	3.201	3.099	27.498	36.644	45.381	34.527	34.540	3.62	75.51	2.59	36.00	0.00	0.025		1383	22222225
12	1595.2	2.874	2.759	27.594	36.756	45.510	34.608	34.605	3.64	83.78	2.56	35.60	0.00			1579	22222225
11	1799.9	2.648	2.519	27.657	36.832	45.596	34.661	34.658	3.71	90.86	2.52	35.20	0.00	0.014	0.000	1778	22222222
10	1999.1	2.418	2.276	27.708	36.895	45.672	34.699	34.697	3.96	92.38	2.44	34.20	0.00			1974	22222225
9	2200.4	2.259	2.101	27.739	36.935	45.721	34.720	34.718	4.14	92.88	2.37	33.30	0.00			2172	22222225
8	2400.2	2.060	1.887	27.768	36.976	45.772	34.735	34.735	4.30	95.08	2.32	32.60	0.00			2368	22222225
7	2602.3	1.892	1.704	27.787	37.005	45.810	34.741	34.740	4.43	96.93	2.29	32.30	0.00			2566	22222225
6	2802.3	1.708	1.505	27.803	37.032	45.847	34.742	34.739	4.55	101.15	2.28	32.40	0.00			2762	22222225
5	3002.2	1.566	1.347	27.811	37.049	45.873	34.738	34.736	4.58	105.87	2.30	32.50	0.00			2958	22222225
4	3204.9	1.435	1.200	27.818	37.064	45.896	34.734	34.731	4.64	109.25	2.31	32.50	0.00			3156	22222225
3	3403.7	1.322	1.070	27.824	37.077	45.916	34.730	34.727	4.70	112.45	2.31	32.80	0.00			3350	22222225
2	3606.3	1.221	0.951	27.828	37.088	45.934	34.725	34.724	4.71	115.83	2.35	32.70	0.00			3548	22222225
1	3788.9	1.205	0.917	27.828	37.091	45.938	34.723	34.723	4.71	116.17	2.36	32.70	0.00	0.005	0.000	3726	22222222

CRUISE: CD 29 STA: 85 DATE (D/M/Y): 10-12-87 TIME: 0953 LAT: 32 24.90 S LONG: 102 29 69 E

GRAVITY= 9.7952 M/S CORIOLIS= -.78178E-04 1/S SOUND SPEED= 1500.1 M/S Depth= 4014 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.915	35.805	5.24	17.915	25.911	34.416	42.555	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.915	35.805	5.24	17.915	25.911	34.416	42.555	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.617	35.808	5.34	17.614	25.907	34.503	42.651	0.041	0.0	-63.90	-3.220	-1005.89	6.432	19.9
30	16.747	35.750	5.47	16.742	26.152	34.698	42.873	0.061	0.1	-63.01	-2.525	-997.37	6.405	29.8
40	16.493	35.749	5.53	16.487	26.212	34.766	42.949	0.079	0.2	6.06	4.963	-182.91	2.743	39.8
50	16.514	35.782	5.51	16.505	26.233	34.786	42.968	0.097	0.2	-5.85	0.637	-143.10	2.426	49.7
100	15.962	35.797	5.46	15.947	26.374	34.946	43.146	0.184	0.9	-9.07	-0.606	-124.84	2.266	99.4
125	15.652	35.736	5.39	15.633	26.399	34.982	43.194	0.226	1.4	-32.53	-6.922	-153.69	2.514	124.2
150	14.329	35.458	5.48	14.307	26.477	35.111	43.371	0.267	2.0	-45.83	-9.485	-215.62	2.978	149.1
200	13.466	35.295	5.56	13.438	26.533	35.203	43.494	0.345	3.4	-12.25	-1.487	-108.45	2.112	198.7
250	12.852	35.229	5.35	12.817	26.607	35.301	43.616	0.421	5.1	-17.72	-2.632	-120.62	2.227	248.4
300	11.945	35.077	5.49	11.905	26.668	35.399	43.749	0.495	7.2	-20.90	-3.502	-105.62	2.084	298.0
350	11.269	34.963	5.54	11.225	26.707	35.467	43.844	0.566	9.5	-8.57	-1.367	-43.62	1.339	347.6
400	10.821	34.892	5.60	10.771	26.733	35.513	43.908	0.636	12.2	-7.78	-1.207	-39.59	1.276	397.2
450	10.425	34.829	5.60	10.371	26.755	35.553	43.964	0.706	15.2	-8.36	-1.281	-41.51	1.307	446.8
500	10.154	34.788	5.63	10.095	26.771	35.580	44.003	0.775	18.6	-4.83	-0.670	-27.30	1.060	496.4
600	9.459	34.699	5.45	9.391	26.820	35.661	44.113	0.912	26.2	-5.75	-0.681	-37.20	1.237	595.5
700	8.881	34.629	5.39	8.804	26.859	35.727	44.204	1.046	35.1	-6.46	-0.694	-43.51	1.338	694.5
800	7.926	34.556	4.85	7.843	26.949	35.860	44.379	1.175	45.0	-13.97	-0.928	-120.45	2.226	793.5
900	6.374	34.449	4.60	6.291	27.080	36.066	44.654	1.293	55.2	-17.97	-1.053	-142.94	2.425	892.5
1000	4.761	34.384	4.47	4.679	27.224	36.289	44.952	1.395	65.1	-10.47	-0.883	-105.54	2.083	991.4
1200	3.659	34.449	3.99	3.569	27.391	36.513	45.229	1.567	84.3	-3.25	0.488	-61.80	1.594	1189.0
1400	3.232	34.534	3.67	3.131	27.501	36.645	45.381	1.713	103.6	-1.78	0.400	-41.81	1.311	1386.4
1600	2.888	34.609	3.63	2.773	27.594	36.755	45.508	1.841	123.2	-1.55	0.385	-33.93	1.181	1583.6
1800	2.607	34.668	3.77	2.479	27.666	36.843	45.609	1.955	142.9	-1.45	0.253	-30.12	1.113	1780.5
2000	2.437	34.696	3.91	2.294	27.705	36.891	45.666	2.057	162.8	-0.79	0.108	-14.63	0.776	1977.3
2200	2.280	34.717	4.04	2.122	27.735	36.930	45.715	2.155	183.7	-0.99	0.097	-16.35	0.820	2173.9
2400	2.076	34.734	4.25	1.903	27.766	36.973	45.768	2.247	205.3	-1.07	0.053	-14.84	0.781	2370.4
2600	1.883	34.739	4.38	1.695	27.787	37.005	45.811	2.334	227.5	-1.12	0.014	-13.22	0.738	2566.6
2800	1.692	34.740	4.45	1.490	27.802	37.032	45.849	2.417	250.2	-0.87	-0.008	-9.31	0.619	2762.0
3000	1.531	34.737	4.55	1.313	27.813	37.052	45.878	2.497	273.8	-0.78	-0.018	-7.98	0.573	2958.5
3200	1.415	34.733	4.60	1.181	27.819	37.066	45.899	2.574	298.3	-0.67	-0.023	-6.51	0.518	3154.2
3400	1.306	34.728	4.64	1.055	27.823	37.078	45.918	2.650	323.9	-0.58	-0.022	-5.70	0.484	3349.7
3600	1.217	34.724	4.67	0.948	27.827	37.087	45.933	2.725	350.6	-0.55	-0.021	-5.52	0.477	3545.1
3800	1.130	34.719	4.71	0.842	27.830	37.097	45.948	2.798	378.4	-0.32	-0.014	-3.19	0.362	3740.2
4000	1.108	34.718	4.73	0.800	27.831	37.101	45.954	2.872	407.5	-0.33	-0.014	-3.19	0.000	3935.2
4069	1.098	34.717	4.71	0.783	27.832	37.102	45.957	2.897	418.0	-0.24	-0.009	-3.19	0.000	4002.5

BOTL	PRES	CTD	TEMP	THETA	SIG-TH	SIG-2	SIG-4	CTD	SAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS			
24	101.0	15.921	15.905	26.384	34.957	43.159	35.797	35.791	5.58	1.57	0.26	0.10	0.00			100	222222255		
23	202.2	13.597	13.569	26.502	35.167	43.454	35.290	35.320	5.62	1.59	0.48	4.40	0.00	2.557	1.383	200	222222222		
22	301.3	11.607	11.568	26.730	35.475	43.838	35.076	35.023	5.61	2.96	0.78	9.80	0.00	2.552	1.296	298	222222222		
21	401.6	10.820	10.770	26.733	35.513	43.908	34.891	34.889	5.62	3.50	0.93	11.90	0.00	2.540	1.355	398	222222222		
20	500.9	10.041	9.982	26.790	35.604	44.032	34.788	34.771	5.59	4.36	1.09	14.40	0.00	2.365	1.278	496	222222222		
19	749.7	8.435	8.355	26.902	35.790	44.287	34.595	34.586	5.12	8.62	1.51	21.40	0.00	1.203	0.674	742	222222222		
18	1000.3	4.749	4.668	27.225	36.291	44.955	34.384	34.382	4.48	34.52	2.23	31.80	0.00	0.250	0.146	990	222222222		
17	1190.9	3.711	3.621	27.386	36.505	45.218	34.449	34.438	4.00	56.88	2.50	34.90	0.00	0.081	0.047	1186	222222222		
16	1399.2	3.206	3.104	27.504	36.649	45.386	34.534	34.539	3.64	74.84	2.58	36.00	0.00	0.024	0.000	1383	222222222		
15	1601.4	2.884	2.769	27.595	36.756	45.509	34.610	34.612	3.60	84.15	2.55	35.60	0.00			1583	222222255		
14	1800.5	2.609	2.480	27.666	36.842	45.609	34.668	34.668	3.76	91.10	2.48	34.80	0.00			1779	222222255		
13	2000.8	2.438	2.295	27.704	36.890	45.666	34.696	34.703	3.90	92.47	2.42	34.00	0.00			1976	222222255		
12	2201.5	2.269	2.111	27.736	36.932	45.717	34.717	34.718	4.07	94.69	2.37	33.40	0.00			2173	222222255		
11	2401.1	2.076	1.903	27.765	36.972	45.768	34.733	34.734	4.25	95.71	2.31	32.60	0.00	0.014		2369	222222225		
10	2600.8	1.917	1.729	27.784	37.000	45.804	34.739	34.736	4.31	101.48	2.31	32.50	0.00			2564	222222255		
9	2800.8	1.709	1.506	27.801	37.030	45.846	34.740	34.741	4.48	103.35	2.29	32.20	0.00			2760	222222255		
8	3003.2	1.536	1.534	27.812	37.052	45.877	34.737		4.54	105.73	2.29	32.20	0.00			2959	252222255		
7	3202.8	1.422	1.187	27.818	37.065	45.898	34.733	34.735	4.62	109.97	2.30	32.30	0.00		0.000	3154	222222252		
6	3402.9	1.308	1.299	27.823	37.077	45.917	34.728		4.65	113.71	2.31	32.50	0.00			3349	252222255		
5	3606.0	1.216	0.946	27.827	37.088	45.934	34.724	34.725	4.68	116.42	2.32	32.60	0.00			3548	222222255		
4	3805.7	1.129	0.840	27.830	37.097	45.948	34.719	34.722	4.71	119.15	2.34	32.80	0.00			3742	222222255		
3	4006.7	1.102	0.794	27.831	37.101	45.955	34.717	34.716	4.72	120.34	2.33	32.70	0.00			3938	222222255		
2	4071.2	1.100	0.785	27.832	37.102	45.957	34.717	34.716	4.74	120.35	2.33	32.60	0.00			4001	222222255		

CRUISE: CD 29 STA: 86 DATE (D/M/Y): 10-12-87 TIME: 1356 LAT: 32 29.73 S LONG: 102 39.41 E

GRAVITY= 9.7952 M/S CORIOLIS= -1.78351E-04 1/S SOUND SPEED= 1503.3 M/S Depth= 4544 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	PGI-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.007	35.821	5.41	18.007	25.900	34.403	42.538	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.007	35.821	5.41	18.007	25.900	34.403	42.538	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.528	35.819	5.67	17.524	26.018	34.536	42.686	0.041	0.0	-32.55	-2.490	-460.86	4.349	19.9
30	16.919	35.780	5.71	16.914	26.135	34.674	42.844	0.060	0.1	-55.32	-4.281	-759.93	5.585	29.8
40	16.582	35.754	5.75	16.576	26.195	34.746	42.926	0.079	0.2	-7.76	0.183	-151.20	2.491	39.8
50	16.519	35.755	5.76	16.511	26.211	34.764	42.947	0.097	0.2	-4.87	0.233	-101.81	2.044	49.7
100	15.989	35.792	5.68	15.973	26.364	34.935	43.135	0.184	0.9	-11.44	-1.476	-114.46	2.167	99.4
125	15.398	35.674	5.57	15.379	26.408	35.002	43.222	0.226	1.4	-30.03	-6.490	-143.18	2.424	124.2
150	14.741	35.534	5.53	14.719	26.446	35.065	43.309	0.267	2.0	-29.24	-5.955	-137.17	2.373	149.1
200	13.534	35.323	5.50	13.506	26.541	35.207	43.496	0.346	3.4	-18.14	-2.522	-143.24	2.425	198.7
250	12.691	35.205	5.40	12.657	26.621	35.321	43.642	0.422	5.1	-19.06	-2.901	-124.01	2.256	248.4
300	11.741	35.043	5.51	11.702	26.680	35.420	43.778	0.495	7.1	-17.33	-3.101	-73.71	1.739	298.0
350	11.083	34.927	5.66	11.040	26.712	35.481	43.865	0.566	9.5	-6.15	-0.798	-41.68	1.308	347.6
400	10.811	34.892	5.64	10.762	26.735	35.515	43.911	0.636	12.2	-8.94	-1.370	-46.46	1.381	397.2
450	10.437	34.833	5.66	10.382	26.756	35.553	43.964	0.705	15.2	-7.32	-1.153	-34.42	1.129	446.8
500	10.069	34.776	5.63	10.010	26.776	35.590	44.016	0.774	18.5	-6.02	-0.856	-32.59	1.156	496.4
600	9.406	34.693	5.49	9.337	26.824	35.667	44.122	0.911	26.2	-7.17	-0.844	-46.93	1.388	595.5
700	8.804	34.623	5.41	8.727	26.866	35.737	44.218	1.044	35.0	-7.07	-0.701	-50.64	1.442	694.5
800	7.867	34.552	4.82	7.784	26.954	35.869	44.390	1.172	44.8	-15.27	-1.104	-123.69	2.253	793.5
900	6.141	34.436	4.61	6.059	27.099	36.096	44.695	1.288	54.9	-14.76	-0.821	-119.85	2.218	892.5
1000	4.897	34.390	4.46	4.815	27.213	36.272	44.928	1.390	64.8	-10.70	-0.183	-102.30	2.049	991.4
1200	3.726	34.457	3.91	3.636	27.392	36.510	45.222	1.562	84.0	-2.79	0.498	-58.00	1.543	1189.0
1400	3.270	34.539	3.61	3.168	27.502	36.643	45.377	1.708	103.3	-2.29	0.339	-43.24	1.332	1386.4
1600	2.918	34.607	3.62	2.802	27.589	36.749	45.501	1.836	122.9	-1.70	0.341	-37.80	1.246	1583.5
1800	2.655	34.662	3.72	2.526	27.658	36.831	45.596	1.950	142.5	-1.14	0.198	-23.57	0.984	1780.5
2000	2.441	34.699	3.81	2.298	27.706	36.892	45.667	2.054	162.7	-1.16	0.151	-21.19	0.932	1977.3
2200	2.230	34.720	3.93	2.072	27.742	36.939	45.726	2.150	183.3	-1.05	0.077	-15.77	0.805	2173.9
2400	2.064	34.731	4.10	1.891	27.765	36.972	45.768	2.241	204.7	-0.95	0.050	-13.34	0.740	2370.4
2600	1.891	34.739	4.35	1.703	27.786	37.004	45.809	2.328	226.9	-0.92	0.016	-11.10	0.675	2566.6
2800	1.726	34.741	4.45	1.522	27.800	37.028	45.843	2.412	249.8	-0.87	-0.008	-9.41	0.621	2762.6
3000	1.579	34.739	4.54	1.360	27.810	37.047	45.871	2.492	273.7	-0.92	-0.020	-9.45	0.623	2958.5
3200	1.432	34.734	4.59	1.197	27.818	37.064	45.896	2.570	298.4	-0.66	-0.023	-6.46	0.515	3154.2
3400	1.331	34.730	4.63	1.079	27.823	37.076	45.915	2.647	324.1	-0.71	-0.027	-7.02	0.537	3349.7
3600	1.215	34.724	4.67	0.945	27.828	37.088	45.934	2.722	350.8	-0.50	-0.021	-4.96	0.451	3545.1
3800	1.136	34.720	4.71	0.848	27.830	37.097	45.948	2.795	378.6	-0.46	-0.020	-4.65	0.437	3740.2
4000	1.092	34.717	4.73	0.784	27.832	37.102	45.957	2.868	407.6	-0.28	-0.012	-2.98	0.350	3935.2
4200	1.053	34.715	4.76	0.725	27.834	37.107	45.965	2.941	438.1	-0.29	-0.012	-3.21	0.363	4130.0
4400	1.023	34.713	4.78	0.673	27.835	37.112	45.972	3.014	470.1	-0.28	-0.013	-3.08	0.355	4324.7
4600	1.002	34.710	4.79	0.631	27.836	37.115	45.978	3.087	503.5	-0.13	-0.006	-3.08	0.000	4519.2
4633	1.003	34.710	4.80	0.628	27.836	37.115	45.979	3.099	509.2	-0.09	-0.007	-3.08	0.000	4551.2

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	102.1	15.762	15.746	26.410	34.989	43.196	35.784	35.737	5.59	0.68	0.22	0.30	0.00				101	22222255
23	204.5	13.844	13.815	26.469	35.124	43.402	35.313	35.358	5.61	1.00	0.43	4.30	0.00				202	22222255
22	301.8	11.918	11.879	26.645	35.378	43.729	35.041	35.096	5.54	2.17	0.70	9.20	0.00				299	22222255
21	500.4	10.167	10.108	26.759	35.568	43.991	34.776	34.788	5.63	3.69	1.00	13.90	0.00				495	22222255
20	698.9	8.818	8.741	26.864	35.735	44.215	34.623	34.620	5.34	5.87	1.33	19.10	0.00				692	22222255
19	900.5	6.084	6.003	27.106	36.106	44.707	34.435	34.429	4.61	22.32	1.94	28.70	0.00				891	22222255
18	1099.5	4.001	3.917	27.320	36.424	45.124	34.403	34.407	4.24	47.59	2.35	34.00	0.00				1088	22222255
17	1300.7	3.457	3.362	27.455	36.587	45.312	34.504	34.503	3.66	69.12	2.51	35.60	0.00				1286	22222255
16	1498.6	3.047	2.939	27.549	36.702	45.447	34.572	34.573	3.62	79.13	2.51	35.60	0.00				1481	22222255
15	1700.6	2.766	2.644	27.630	36.798	45.556	34.640	34.637	3.67	87.26	2.49	35.20	0.00				1680	22222255
14	1900.2	2.545	2.409	27.683	36.863	45.633	34.682	34.681	3.79	92.02	2.43	34.50	0.00				1877	22222255
13	2088.2	2.339	2.190	27.724	36.915	45.696	34.710	34.708	3.89	99.14	2.38	34.10	0.00				2061	22222255
12	2304.6	2.153	1.987	27.754	36.956	45.747	34.727	34.724	4.04	101.17	2.36	33.60	0.00				2274	22222255
11	2503.0	1.956	1.776	27.777	36.991	45.793	34.735	34.733	4.26	101.16	2.29	32.70	0.00				2469	22222255
10	2804.1	1.714	1.510	27.802	37.030	45.846	34.741	34.738	4.50	101.66	2.24	32.20	0.00				2764	22222255
9	3004.7	1.563	1.344	27.811	37.049	45.874	34.738	34.736	4.61	104.89	2.23	32.20	0.00				2960	22222255
8	3204.7	1.418	1.183	27.819	37.066	45.899	34.734	34.732	4.63	109.30	2.24	32.20	0.00				3156	22222255
7	3405.1	1.318	1.066	27.824	37.078	45.917	34.730	34.727	4.66	112.18	2.26	32.50	0.00				3352	22222255
6	3707.0	1.168	0.889	27.829	37.093	45.942	34.722	34.724	4.72	117.28	2.28	32.70	0.00				3646	22222255
5	4008.1	1.090	0.782	27.833	37.103	45.958	34.718	34.715	0.00	120.16	2.28	32.90	0.00				3940	22222255
4	4209.0	1.049	0.720	27.834	37.107	45.966	34.714	34.711	4.79	121.69	2.31	32.90	0.00				4135	22222255
3	4412.3	1.019	0.668	27.836	37.113	45.974	34.713	34.709	4.79	122.70	2.33	33.00	0.00				4333	22222255
2	4635.4	1.003	0.628	27.836	37.115	45.978	34.710	34.710	4.79	123.55	2.30	33.10	0.00				4550	22222255

CRUISE: CD 29 STA: 87 DATE (D/M/Y): 10-12-87 TIME: 1917 LAT: 32 35 90 S LONG: 102 59.45 E

GRAVITY= 9.7953 M/S CORIOLIS= -.78572E-04 1/S SOUND SPEED= 1504.3 M/S Depth= 4779 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	17.839	35.648	5.06	17.839	25.809	34.326	42.462	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.839	35.648	5.06	17.839	25.809	34.320	42.462	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.267	35.728	5.74	17.263	26.011	34.539	42.699	0.043	0.0	-107.08	-8.852	-1464.47	7.742	19.9
30	16.718	35.689	5.86	16.713	26.113	34.660	42.837	0.062	0.1	5.91	8.190	-376.41	3.925	29.8
40	16.750	35.766	5.80	16.744	26.164	34.709	42.885	0.081	0.2	-34.42	-3.439	-423.92	4.165	39.8
50	16.465	35.732	5.79	16.457	26.206	34.761	42.946	0.099	0.2	-5.90	2.948	-281.11	3.392	49.7
100	15.346	35.641	5.65	15.331	26.394	34.989	43.212	0.185	0.9	-27.39	-4.562	-203.68	2.887	99.4
125	14.598	35.507	5.59	14.579	26.456	35.080	43.330	0.226	1.4	-30.84	-5.709	-184.62	2.749	124.2
150	13.994	35.403	5.49	13.972	26.506	35.153	43.425	0.266	1.9	-24.06	-3.879	-167.21	2.616	149.1
200	13.274	35.309	5.34	13.246	26.583	35.260	43.558	0.343	3.3	-16.80	-2.151	-138.94	2.385	198.7
250	12.347	35.161	5.47	12.314	26.654	35.368	43.702	0.416	5.0	-17.82	-3.132	-86.11	1.877	248.4
300	11.574	35.023	5.53	11.535	26.696	35.443	43.807	0.488	7.0	-12.35	-2.267	-48.03	1.402	298.0
350	11.182	34.962	5.61	11.138	26.721	35.485	43.865	0.558	9.3	-9.23	-1.311	-55.83	1.512	347.6
400	10.541	34.854	5.66	10.493	26.753	35.545	43.952	0.628	12.0	-11.88	-1.957	-51.20	1.448	397.2
450	10.079	34.778	5.65	10.026	26.775	35.588	44.013	0.696	14.9	-8.09	-1.258	-36.93	1.229	446.8
500	9.735	34.731	5.56	9.677	26.797	35.625	44.065	0.764	18.2	-4.81	-0.498	-36.04	1.214	496.3
600	9.223	34.671	5.48	9.156	26.836	35.687	44.150	0.898	25.8	-6.10	-0.726	-38.34	1.253	595.5
700	8.607	34.604	5.29	8.531	26.883	35.763	44.252	1.030	34.5	-8.16	-0.689	-63.89	1.617	694.5
800	7.371	34.514	4.76	7.291	26.995	35.933	44.476	1.155	44.1	-15.29	-1.069	-122.90	2.243	793.5
900	5.875	34.422	4.57	5.794	27.122	36.132	44.743	1.268	53.8	-14.96	-0.747	-122.92	2.243	892.5
1000	4.662	34.384	4.45	4.582	27.234	36.305	44.972	1.367	63.4	-8.93	-0.024	-91.58	1.936	991.3
1200	3.722	34.460	3.93	3.632	27.394	36.512	45.224	1.537	82.4	-2.75	0.477	-56.28	1.518	1188.9
1400	3.261	34.545	3.60	3.159	27.507	36.649	45.384	1.682	101.6	-2.10	0.355	-42.35	1.316	1386.3
1600	2.891	34.609	3.63	2.776	27.594	36.755	45.507	1.809	121.0	-1.42	0.306	-32.77	1.158	1583.5
1800	2.649	34.663	3.72	2.520	27.659	36.833	45.598	1.922	140.6	-1.28	0.210	-25.80	1.028	1780.5
2000	2.427	34.699	3.89	2.284	27.708	36.894	45.670	2.026	160.7	-1.07	0.143	-19.78	0.900	1977.3
2200	2.253	34.721	4.08	2.095	27.741	36.937	45.723	2.122	181.4	-0.94	0.092	-15.63	0.800	2173.9
2400	2.092	34.735	4.25	1.919	27.766	36.972	45.766	2.214	202.8	-0.98	0.035	-12.78	0.723	2370.3
2600	1.916	34.741	4.39	1.728	27.786	37.002	45.806	2.301	225.0	-0.83	0.020	-10.41	0.653	2566.6
2800	1.738	34.742	4.49	1.535	27.801	37.028	45.842	2.385	248.1	-1.02	-0.009	-11.08	0.673	2762.6
3000	1.554	34.738	4.56	1.336	27.812	37.050	45.875	2.465	271.9	-0.98	-0.024	-9.90	0.637	2958.5
3200	1.374	34.732	4.61	1.141	27.821	37.070	45.905	2.542	296.3	-0.92	-0.033	-8.92	0.604	3154.2
3400	1.252	34.726	4.63	1.002	27.825	37.083	45.926	2.617	321.5	-0.65	-0.026	-6.36	0.510	3349.7
3600	1.175	34.723	4.68	0.906	27.829	37.092	45.940	2.690	347.7	-0.48	-0.020	-4.72	0.440	3545.0
3800	1.103	34.719	4.70	0.816	27.832	37.100	45.953	2.763	375.1	-0.40	-0.017	-4.03	0.406	3740.2
4000	1.054	34.716	4.73	0.748	27.833	37.105	45.962	2.835	403.8	-0.31	-0.012	-3.33	0.369	3935.2
4200	1.026	34.714	4.76	0.699	27.835	37.110	45.969	2.907	433.9	-0.28	-0.012	-2.96	0.348	4130.0
4400	1.000	34.712	4.79	0.651	27.836	37.114	45.976	2.979	465.5	-0.23	-0.010	-2.52	0.321	4324.7
4600	0.983	34.710	4.82	0.612	27.837	37.117	45.981	3.052	498.7	-0.11	-0.005	-1.29	0.230	4519.1
4800	0.986	34.709	4.85	0.593	27.837	37.118	45.983	3.125	533.7	-0.15	-0.007	-1.29	0.000	4713.4
4855	0.979	34.708	4.85	0.579	27.838	37.120	45.986	3.145	543.7	-0.18	-0.008	-1.29	0.000	4766.9

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	2.8	17.778	17.777	25.104	33.628	41.784	34.708	35.723	5.57	0.75	0.19	0.10	0.00			2	222222255
23	104.1	15.224	15.208	26.406	35.006	43.233	35.621	35.631	5.58	0.95	0.29	1.30	0.00			103	222222255
22	201.3	13.286	13.258	26.578	35.254	43.552	35.306	35.314	5.36	1.49	0.54	6.30	0.00			199	222222255
21	301.2	11.512	11.474	26.703	35.453	43.819	35.018	35.003	5.62	2.53	0.79	10.10	0.00	2.608	1.422	298	222222222
20	401.1	10.553	10.529	26.750	35.542	43.948	34.853		5.63	2.89	0.91	12.30	0.00			397	252222255
19	501.1	9.790	9.732	26.788	35.614	44.052	34.731	34.736	5.56	3.77	1.12	15.20	0.00	2.354	1.281	496	222222222
18	698.9	8.639	8.563	26.879	35.757	44.245	34.606	34.604	5.20	7.35	1.42	20.20	0.00			692	222222255
17	898.5	6.015	5.933	27.105	36.109	44.713	34.423	34.427	4.55	22.96	1.97	28.90	0.00			889	222222255
16	1099.4	4.003	3.919	27.324	36.428	45.127	34.408	34.404	4.22	47.35	2.35	33.70	0.00			1088	222222255
15	1298.1	3.452	3.451	27.453	36.585	45.310	34.500		3.64	69.39	2.52	35.50	0.00	0.017	0.000	1284	252222222
14	1499.2	3.099	2.990	27.551	36.701	45.443	34.580	34.569	3.56	78.88	2.54	35.70	0.00			1482	222222255
13	1799.3	2.669	2.540	27.657	36.830	45.594	34.663	34.657	3.69	89.57	2.47	34.80	0.00			1777	222222255
12	2099.3	2.361	2.210	27.723	36.914	45.693	34.711	34.707	3.97	92.79	2.36	33.70	0.00			2072	222222255
11	2399.9	2.082	1.909	27.767	36.973	45.768	34.735	34.735	4.27	94.17	2.27	32.50	0.00	0.001	0.000	2367	222222222
10	2701.2	1.823	1.627	27.794	37.016	45.825	34.742	34.744	4.45	98.24	2.26	32.00	0.00			2663	222222255
9	3003.7	1.538	1.319	27.813	37.052	45.878	34.738	34.731	4.61	109.08	2.25	32.40	0.00			2959	222222255
8	3202.0	1.374	1.140	27.821	37.070	45.905	34.732	34.731	4.63	110.11	2.21	32.30	0.00			3153	222222255
7	3506.4	1.206	0.947	27.827	37.088	45.934	34.724	34.722	4.68	115.71	2.27	32.70	0.00			3450	222222255
6	3705.6	1.130	0.852	27.830	37.096	45.947	34.720	34.720	4.71	117.75	2.27	32.80	0.00			3645	222222255
5	4008.9	1.050	0.743	27.834	37.106	45.963	34.716	34.714	4.73	120.63	2.28	32.90	0.00			3940	222222255
4	4208.5	1.018	0.690	27.835	37.110	45.970	34.713	34.712	4.77	122.34	2.27	33.10	0.00			4135	222222255
3	4408.1	0.995	0.646	27.837	37.115	45.977	34.712	34.712	4.78	122.86	2.27	33.10	0.00			4329	222222255
2	4611.0	0.903	0.612	27.837	37.117	45.981	34.710	34.712	4.78	123.89		33.30	0.00			4526	222222255
1	4860.7	0.900	0.580	27.837	37.119	45.985	34.708	34.703	4.78	124.74	2.27	33.30	0.00	0.005	0.000	4769	222222222

CRUISE: CD 29 STA: 88 DATE (D/M/Y): 11-12-87 TIME: 0109 LAT: 32 44.88 S LONG 163 24.00 E

GRAVITY= 9.7954 M/S CORIOLIS= -.78893E-04 1/S SOUND SPEED= 1507.3 M/S Depth= 5261 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	θ-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m/s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.660	35.705	5.49	17.660	25.897	34.412	42.560	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.660	35.705	5.49	17.660	25.897	34.412	42.560	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.621	35.752	5.70	17.618	25.943	34.459	42.608	0.042	0.0	-21.39	7.993	-877.76	5.981	19.9
30	17.121	35.758	5.75	17.116	26.070	34.602	42.766	0.062	0.1	-74.08	-4.703	-1096.44	6.685	29.8
40	16.802	35.782	5.81	16.796	26.164	34.707	42.881	0.081	0.2	3.70	6.502	-317.95	3.600	39.8
50	16.784	35.804	5.76	16.776	26.186	34.730	42.903	0.099	0.2	-12.42	-2.085	-104.45	2.063	49.7
100	14.552	35.479	5.77	14.537	26.443	35.069	43.321	0.186	0.9	-25.55	-3.670	-211.91	2.939	99.4
125	13.965	35.380	5.64	13.947	26.492	35.142	43.414	0.225	1.4	-18.76	-3.430	-107.86	2.097	124.2
150	13.624	35.317	5.55	13.603	26.516	35.179	43.464	0.264	1.9	-23.99	-4.701	-107.07	2.089	149.1
200	12.844	35.230	5.38	12.816	26.608	35.302	43.617	0.340	3.3	-18.79	-2.731	-132.26	2.322	198.7
250	12.018	35.097	5.49	11.985	26.668	35.396	43.743	0.413	4.9	-13.46	-2.286	-67.42	1.658	248.4
300	11.495	35.009	5.56	11.457	26.699	35.450	43.817	0.484	6.9	-9.69	-1.516	-52.40	1.461	298.0
350	10.972	34.922	5.62	10.929	26.728	35.501	43.890	0.554	9.2	-9.73	-1.639	-42.54	1.317	347.6
400	10.476	34.839	5.66	10.428	26.753	35.548	43.957	0.623	11.9	-9.03	-1.420	-42.71	1.319	397.2
450	10.026	34.769	5.62	9.973	26.777	35.592	44.020	0.692	14.9	-7.39	-1.046	-39.83	1.274	446.8
500	9.767	34.735	5.56	9.709	26.795	35.622	44.061	0.760	18.1	-5.18	-0.606	-34.67	1.189	496.3
600	9.176	34.666	5.44	9.108	26.840	35.694	44.158	0.894	25.7	-7.17	-0.844	-45.39	1.360	595.5
700	8.476	34.594	5.15	8.401	26.894	35.780	44.275	1.025	34.3	-9.49	-0.716	-78.70	1.791	694.5
800	7.092	34.497	4.66	7.014	27.021	35.972	44.527	1.147	43.7	-15.75	-1.107	-123.61	2.245	793.5
900	5.564	34.404	4.61	5.485	27.146	36.171	44.798	1.257	53.2	-14.12	-0.654	-116.75	2.181	892.5
1000	4.512	34.381	4.43	4.433	27.248	36.326	45.001	1.354	62.6	-7.59	0.107	-85.12	1.853	991.3
1200	3.651	34.460	3.91	3.562	27.401	36.523	45.239	1.522	81.4	-2.29	0.555	-56.76	1.521	1188.9
1400	3.312	34.557	3.51	3.209	27.512	36.651	45.383	1.666	100.5	-2.00	0.371	-42.69	1.319	1386.3
1600	2.961	34.618	3.52	2.845	27.594	36.752	45.501	1.793	119.9	-1.58	0.304	-34.58	1.187	1583.5
1800	2.698	34.670	3.58	2.568	27.660	36.832	45.594	1.907	139.6	-1.35	0.185	-25.15	1.012	1780.5
2000	2.465	34.699	3.74	2.321	27.704	36.888	45.663	2.011	159.8	-1.13	0.114	-18.76	0.874	1977.3
2200	2.266	34.717	3.97	2.108	27.737	36.932	45.717	2.109	180.6	-0.95	0.077	-14.71	0.774	2173.9
2400	2.094	34.734	4.24	1.921	27.765	36.971	45.765	2.201	202.2	-0.94	0.051	-13.29	0.736	2370.3
2600	1.921	34.740	4.36	1.733	27.784	37.000	45.804	2.288	224.6	-0.98	0.002	-11.08	0.672	2566.5
2800	1.764	34.740	4.43	1.561	27.797	37.023	45.836	2.373	247.8	-0.80	0.015	-10.08	0.641	2762.6
3000	1.612	34.738	4.54	1.393	27.808	37.043	45.865	2.454	271.9	-0.96	-0.025	-9.72	0.629	2958.5
3200	1.438	34.733	4.60	1.203	27.817	37.063	45.895	2.533	296.8	-0.82	-0.023	-8.38	0.584	3154.2
3400	1.292	34.728	4.64	1.041	27.824	37.079	45.920	2.609	322.4	-0.83	-0.031	-8.31	0.582	3349.7
3600	1.172	34.721	4.69	0.904	27.828	37.091	45.939	2.683	348.9	-0.56	-0.027	-5.42	0.470	3545.0
3800	1.090	34.717	4.73	0.803	27.831	37.100	45.953	2.756	376.3	-0.46	-0.020	-4.65	0.435	3740.2
4000	1.024	34.714	4.76	0.718	27.834	37.107	45.966	2.828	404.8	-0.36	-0.016	-3.76	0.391	3935.2
4200	0.987	34.711	4.78	0.661	27.835	37.112	45.973	2.899	434.7	-0.26	-0.010	-2.86	0.342	4130.0
4400	0.968	34.709	4.81	0.621	27.836	37.115	45.979	2.970	466.0	-0.17	-0.009	-1.85	0.274	4324.6
4600	0.963	34.708	4.82	0.593	27.837	37.118	45.983	3.042	498.9	-0.12	-0.005	-1.41	0.239	4519.1
4800	0.966	34.707	4.85	0.573	27.837	37.119	45.985	3.115	533.7	-0.09	-0.004	-1.07	0.209	4713.4
5000	0.976	34.706	4.85	0.559	27.837	37.120	45.987	3.188	570.5	-0.07	-0.004	-0.70	0.169	4907.6
5200	0.987	34.706	4.88	0.546	27.838	37.121	45.989	3.263	609.3	-0.06	-0.003	-0.73	0.172	5101.6
5341	0.998	34.705	4.89	0.539	27.838	37.122	45.990	3.316	637.9	-0.05	-0.006	-0.73	0.000	5238.2

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	9.8	17.532	17.531	25.932	34.451	42.602	35.709		5.62	1.22	0.24	0.10	0.00	2.314	1.363	9	252222222
23	101.9	14.223	14.214	26.514	35.152	43.414	35.479		5.71	1.39	0.39	3.00	0.00	2.451	1.389	101	252222222
22	200.2	12.461	12.435	26.683	35.391	43.720	35.228	35.159	5.50	2.24	0.63	8.30	0.00	2.436	1.404	198	222222222
21	301.9	11.021	10.983	26.706	35.556	43.941	35.009	34.924	5.65	3.26	0.84	11.60	0.00	2.564	1.415	299	222222222
20	400.3	10.400	10.352	26.765	35.563	43.976	34.838	34.825	5.64	3.60	0.96	13.40	0.00	2.509	1.426	396	222222222
19	502.4	9.689	9.631	26.806	35.636	44.079	34.733	34.726	5.38	4.94	1.14	16.40	0.00			497	222222255
18	700.4	8.399	8.370	26.906	35.795	44.293	34.593		5.07	8.82	1.49	21.90	0.00	1.188	0.710	693	252222222
17	899.1	5.679	5.663	27.132	36.152	44.772	34.405		4.62	25.01	2.02	30.00	0.00	0.473	0.275	890	252222222
16	1101.3	3.995	3.912	27.331	36.435	45.135	34.416	34.403	4.24	48.26	2.37	34.60	0.00	0.117	0.082	1089	222222222
15	1300.4	3.460	3.364	27.468	36.599	45.324	34.520	34.513	3.64	72.02	2.55	36.70	0.00	0.017		1286	222222225
14	1499.4	3.135	3.026	27.555	36.703	45.443	34.589	34.582	3.47	83.48	2.57	37.00	0.00			1482	222222255
13	1797.5	2.740	2.609	27.656	36.825	45.585	34.669	34.662	3.57	95.10	2.51	36.20	0.00	0.009	0.000	1776	222222222
12	2101.2	2.380	2.229	27.720	36.909	45.688	34.709	34.704	3.84	99.99	2.43	35.20	0.00			2074	222222255
11	2401.0	2.104	1.930	27.764	36.969	45.763	34.734	34.731	4.22	96.63	2.30	33.80	0.00	0.003	0.000	2369	222222222
10	2703.1	1.849	1.653	27.789	37.010	45.818	34.739	34.737	4.33	103.70	2.30	33.70	0.00			2665	222222255
9	3001.9	1.634	1.413	27.806	37.040	45.861	34.738	34.737	4.57	104.03	2.24	33.00	0.00			2957	222222255
8	3303.1	1.375	1.132	27.820	37.070	45.905	34.730	34.729	4.65	111.45	2.25	33.30	0.00			3252	222222255
7	3582.0	1.196	0.929	27.827	37.089	45.936	34.723	34.722	4.72	116.84	2.29	33.70	0.00	0.002	0.000	3524	222222222
6	3907.1	1.059	0.762	27.832	37.103	45.959	34.715	34.717	4.73	119.04	2.29	33.70	0.00	0.005	0.000	3841	222222222
5	4211.0	0.989	0.661	27.835	37.112	45.973	34.711	34.711	4.80	124.25	2.33	34.00	0.00			4137	222222255
4	4511.5	0.967	0.607	27.836	37.116	45.980	34.708	34.707	4.81	124.76	2.32	34.00	0.00			4430	222222255
3	4811.7	0.967	0.573	27.837	37.119	45.986	34.707	34.705	4.81	125.26	2.37	34.00	0.00			4721	222222255
2	5115.2	0.981	0.551	27.838	37.121	45.989	34.706	34.705	4.82	126.11	2.32	34.10	0.00	0.002	0.000	5016	222222222
1	5344.8	0.998	0.539	27.838	37.122	45.990	34.705	34.700	4.85	125.94	2.32	33.80	0.00			5238	222222255

CRUISE: CD 29 STA: 89 DATE (D/M/Y): 11-12-87 TIME: 0824 LAT: 32 54 91 S LONG 103 59 00 E

GRAVITY= 9.7956 M/S CORIOLIS= -.79250E-04 1/S SOUND SPEED= 1508.8 M/S Depth= 5467 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-5 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	17.897	35.816	5.20	17.897	25.924	34.430	42.569	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.897	35.816	5.20	17.897	25.924	34.430	42.569	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.591	35.806	5.53	17.588	25.992	34.509	42.657	0.041	0.0	-82.88	-11.889	-855.69	5.892	19.9
30	16.611	35.711	5.65	16.606	26.154	34.705	42.885	0.061	0.1	-40.55	1.550	-836.35	5.825	29.8
40	16.372	35.704	5.69	16.365	26.205	34.764	42.952	0.079	0.2	-7.30	2.180	-262.75	3.265	39.8
50	16.424	35.753	5.66	16.416	26.232	34.788	42.974	0.097	0.2	-6.17	-0.200	-100.26	2.017	49.7
100	14.618	35.508	5.72	14.603	26.451	35.074	43.323	0.182	0.9	-28.07	-4.685	-197.70	2.832	99.4
125	14.047	35.410	5.64	14.029	26.499	35.144	43.414	0.221	1.3	-16.63	-2.292	-135.28	2.343	124.2
150	13.862	35.409	5.58	13.840	26.538	35.191	43.467	0.260	1.9	-0.49	1.482	-96.61	1.980	149.1
200	12.962	35.253	5.37	12.935	26.603	35.292	43.602	0.336	3.2	-27.59	-5.112	-131.87	2.313	198.7
250	11.860	35.063	5.53	11.828	26.672	35.406	43.759	0.408	4.9	-17.36	-2.950	-84.69	1.854	248.4
300	11.248	34.960	5.66	11.211	26.706	35.468	43.845	0.479	6.9	-7.99	-1.164	-47.32	1.386	298.0
350	10.875	34.902	5.64	10.832	26.730	35.508	43.900	0.549	9.2	-9.03	-1.432	-44.13	1.338	347.6
400	10.403	34.827	5.65	10.355	26.756	35.554	43.967	0.618	11.8	-8.80	-1.349	-43.05	1.372	397.2
450	9.986	34.764	5.58	9.934	26.780	35.597	44.026	0.686	14.8	-7.74	-1.127	-39.72	1.269	446.8
500	9.681	34.725	5.52	9.623	26.801	35.632	44.074	0.754	18.1	-4.94	-0.505	-37.40	1.232	496.3
600	9.100	34.656	5.45	9.033	26.844	35.701	44.168	0.887	25.6	-5.87	-0.715	-35.89	1.207	595.4
700	8.509	34.593	5.21	8.434	26.889	35.773	44.267	1.018	34.2	-8.98	-0.780	-69.18	1.675	694.5
800	7.270	34.503	4.72	7.191	27.001	35.944	44.491	1.142	43.7	-14.32	-0.868	-122.45	2.229	793.5
900	5.751	34.419	4.53	5.672	27.134	36.150	44.767	1.254	53.4	-15.56	-0.689	-132.37	2.318	892.5
1000	4.531	34.388	4.36	4.451	27.252	36.329	45.003	1.351	62.8	-8.46	0.126	-95.72	1.971	991.3
1200	3.653	34.471	3.83	3.564	27.409	36.531	45.247	1.517	81.4	-2.31	0.436	-49.83	1.422	1188.9
1400	3.226	34.548	3.60	3.124	27.513	36.656	45.393	1.661	100.4	-1.84	0.418	-44.10	1.338	1386.3
1600	2.923	34.615	3.58	2.808	27.595	36.755	45.506	1.787	119.7	-1.38	0.299	-32.28	1.144	1583.5
1800	2.687	34.662	3.64	2.557	27.655	36.827	45.590	1.901	139.4	-1.14	0.210	-24.57	0.998	1780.5
2000	2.463	34.697	3.73	2.320	27.703	36.888	45.662	2.005	159.6	-1.02	0.117	-17.85	0.851	1977.3
2200	2.277	34.716	3.85	2.119	27.735	36.930	45.714	2.103	180.6	-1.00	0.070	-14.95	0.779	2173.9
2400	2.103	34.726	3.96	1.930	27.758	36.963	45.757	2.196	202.4	-0.89	0.039	-12.20	0.704	2370.3
2600	1.966	34.734	4.15	1.777	27.776	36.989	45.791	2.286	225.2	-0.82	0.035	-11.42	0.681	2566.5
2800	1.801	34.737	4.30	1.596	27.792	37.016	45.827	2.372	248.9	-0.89	0.000	-10.28	0.646	2762.6
3000	1.656	34.737	4.41	1.435	27.804	37.036	45.856	2.455	273.4	-0.77	-0.002	-8.93	0.602	2958.5
3200	1.496	34.734	4.52	1.260	27.814	37.057	45.886	2.535	298.0	-1.00	-0.023	-10.66	0.658	3154.2
3400	1.329	34.729	4.58	1.077	27.822	37.075	45.914	2.612	324.8	-0.76	-0.033	-7.43	0.549	3349.7
3600	1.227	34.724	4.62	0.958	27.826	37.086	45.931	2.687	351.7	-0.57	-0.020	-5.91	0.490	3545.0
3800	1.147	34.720	4.64	0.859	27.829	37.095	45.945	2.761	379.6	-0.43	-0.016	-4.54	0.429	3740.2
4000	1.076	34.716	4.70	0.769	27.832	37.103	45.958	2.834	408.7	-0.47	-0.019	-5.00	0.451	3935.2
4200	1.012	34.712	4.74	0.686	27.834	37.110	45.970	2.907	438.9	-0.35	-0.016	-3.69	0.387	4130.0
4400	0.978	34.710	4.77	0.630	27.836	37.115	45.978	2.978	470.3	-0.23	-0.009	-2.59	0.324	4324.7
4600	0.965	34.708	4.80	0.595	27.836	37.117	45.982	3.050	503.4	-0.15	-0.007	-1.74	0.265	4519.1
4800	0.963	34.707	4.82	0.570	27.837	37.120	45.986	3.123	538.1	-0.11	-0.005	-1.33	0.232	4713.4
5000	0.969	34.706	4.84	0.553	27.838	37.121	45.988	3.196	574.8	-0.08	-0.004	-1.00	0.201	4907.6
5200	0.980	34.706	4.86	0.539	27.838	37.122	45.990	3.271	613.5	-0.05	-0.004	-0.51	0.144	5101.6
5400	0.998	34.705	4.87	0.532	27.838	37.122	45.991	3.346	654.3	-0.03	-0.002	-0.39	0.125	5295.4
5559	1.014	34.704	4.87	0.528	27.838	37.123	45.991	3.407	688.4	-0.03	-0.003	-0.39	0.000	5449.4

BOTL NO.	PRES DBAR	CTD TMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUAL1
24	11.8	17.898	17.896	25.933	34.439	42.577	35.827	35.842	5.56	1.55	0.19	0.10	0.00			11	22222255
23	103.4	14.433	14.418	26.483	35.113	43.368	35.497	35.474	5.67	1.02	0.36	2.20	0.00			102	22222255
22	203.0	13.012	12.996	26.583	35.271	43.579	35.241		5.41	1.69	0.54	6.40	0.00			201	25222255
21	303.9	11.324	11.286	26.693	35.451	43.825	34.960	34.967	5.69	2.34	0.77	10.00	0.00			301	27222255
20	399.0	10.507	10.458	26.739	35.533	43.941	34.828	34.844	5.66	3.00	0.91	12.40	0.00			395	22222255
19	501.5	9.758	9.700	26.780	35.615	44.055	34.724	34.730	5.47	4.00	1.09	15.10	0.00			497	22222255
18	702.2	8.445	8.370	26.897	35.784	44.280	34.591	34.587	5.13	8.05	1.44	20.00	0.00			695	22222255
17	900.7	5.494	5.417	27.165	36.194	44.822	34.418	34.401	4.49	27.13	2.06	30.30	0.00			891	22222255
16	1101.0	3.932	3.849	27.341	36.449	45.151	34.421	34.415	4.12	50.59	2.36	34.10	0.00			1089	22222255
15	1297.1	3.421	3.326	27.460	36.593	45.320	34.505	34.507	3.61	69.49	2.50	35.70	0.00			1283	22222255
14	1498.5	3.061	2.953	27.558	36.710	45.454	34.585	34.592	3.52	81.79	2.53	36.10	0.00			1481	22222255
13	1697.6	2.785	2.683	27.630	36.796	45.554	34.642	34.647	3.59	90.03	2.47	35.60	0.00			1677	22222255
12	1998.1	2.467	2.323	27.703	36.887	45.661	34.697	34.695	3.73	98.60	2.42	35.00	0.00			1973	22222255
11	2299.6	2.183	2.184	27.748	36.948	45.738	34.722		3.92	104.12	2.36	34.80	0.00			2269	25222255
10	2600.5	1.968	1.778	27.776	36.990	45.791	34.734	34.730	4.19	103.24	2.29	33.80	0.00			2564	22222255
9	2899.4	1.724	1.511	27.798	37.027	45.842	34.737	34.737	4.37	106.06	2.27	33.00	0.00			2857	22222255
8	3203.1	1.502	1.265	27.814	37.057	45.885	34.735	34.737	4.57	107.87	2.22	32.50	0.00			3154	22222255
7	3503.0	1.276	1.015	27.823	37.080	45.922	34.725	34.727	4.64	114.57	2.24	32.80	0.00			3448	22222255
6	3806.6	1.138	0.850	27.839	37.096	45.947	34.720	34.719	4.73	118.41	2.24	33.10	0.00			3743	22222255
5	4206.8	1.006	0.679	27.835	37.111	45.971	34.712	34.712	4.78	122.24	2.27	33.00	0.00			4133	22222255
4	4610.6	0.964	0.593	27.837	37.118	45.983	34.708	34.709	4.81	123.88	2.27	33.30	0.00			4526	22222255
3	5012.6	0.970	0.552	27.838	37.121	45.988	34.706	34.704	4.80	124.67	2.27	33.30	0.00			4916	22222255
2	5414.0	0.999	0.531	27.838	37.123	45.991	34.705	34.706	4.81	124.62	2.27	33.40	0.00			5306	22222255
1	5566.2	1.015	0.527	27.838	37.123	45.992	34.705	34.705	4.81	125.58	2.27	33.30	0.00			5452	22222255

CRUISE: CD 29 STA: 90 DATE (D/M/Y): 11-12-87 TIME 1519 LAT: 33 5 54 S LONG 104 30.27 E

GRAVITY= 9.7957 M/S CORIOLIS= - 79628E-04 1/S SOUND SPEED= 1508.6 M/S Depth= 5508 Cor Meters

PRES DBAR	TEMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	17.959	35.862	4.98	17.959	25.944	34.447	42.584	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.959	35.862	4.98	17.959	25.944	34.447	42.584	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.879	35.860	5.56	17.876	25.963	34.469	42.608	0.041	0.0	-79.60	-3.762	-1266.53	7.208	19.9
30	16.741	35.804	5.71	16.736	26.195	34.740	42.915	0.060	0.1	-50.36	-2.374	-790.61	5.651	29.8
40	16.465	35.795	5.76	16.459	26.254	34.808	42.992	0.078	0.2	-16.80	0.048	-310.65	3.542	39.8
50	16.335	35.800	5.74	16.327	26.288	34.847	43.035	0.096	0.2	-12.57	-0.552	-196.09	2.814	49.7
100	15.881	35.751	5.75	15.865	26.358	34.933	43.137	0.181	0.9	-37.99	-6.086	-301.65	3.498	99.4
125	14.433	35.520	5.66	14.415	26.502	35.132	43.387	0.222	1.4	-24.68	-3.364	-234.28	3.076	124.2
150	13.990	35.438	5.48	13.969	26.533	35.181	43.452	0.261	1.9	-24.74	-5.007	-107.80	2.087	149.1
200	12.911	35.246	5.59	12.883	26.608	35.299	43.611	0.336	3.2	-22.95	-4.081	-119.36	2.195	198.7
250	12.132	35.113	5.60	12.099	26.659	35.382	43.724	0.409	4.9	-17.01	-2.861	-87.81	1.883	248.4
300	11.122	34.941	5.63	11.085	26.715	35.481	43.864	0.480	6.9	-15.35	-2.449	-77.17	1.765	298.0
350	10.531	34.845	5.70	10.489	26.746	35.539	43.946	0.549	9.2	-9.34	-1.443	-45.59	1.357	347.6
400	10.094	34.780	5.60	10.047	26.773	35.585	44.010	0.617	11.8	-7.47	-1.060	-40.14	1.273	397.2
450	9.722	34.722	5.62	9.670	26.791	35.619	44.060	0.685	14.7	-4.36	-0.541	-27.27	1.049	446.8
500	9.490	34.699	5.52	9.433	26.812	35.651	44.102	0.752	18.0	-4.99	-0.511	-37.24	1.226	496.3
600	8.875	34.626	5.50	8.809	26.856	35.724	44.201	0.884	25.4	-7.27	-0.869	-44.52	1.341	595.4
700	8.202	34.556	5.16	8.128	26.907	35.805	44.312	1.013	33.9	-8.02	-0.620	-65.57	1.627	694.5
800	7.008	34.482	4.70	6.930	27.020	35.975	44.534	1.136	43.3	-16.06	-0.936	-137.55	2.357	793.5
900	5.515	34.404	4.55	5.437	27.152	36.179	44.807	1.245	52.7	-12.24	-0.505	-105.78	2.067	892.4
1000	4.431	34.384	4.45	4.352	27.259	36.341	45.020	1.342	62.1	-10.40	0.120	-116.05	2.165	991.3
1200	3.598	34.473	3.86	3.509	27.416	36.541	45.259	1.506	80.5	-2.71	0.425	-53.37	1.468	1188.9
1400	3.229	34.551	3.60	3.127	27.515	36.658	45.394	1.648	99.3	-1.67	0.350	-38.35	1.145	1386.3
1600	2.914	34.619	3.57	2.798	27.600	36.760	45.511	1.774	118.6	-1.30	0.294	-31.38	1.126	1583.5
1800	2.665	34.663	3.69	2.536	27.658	36.831	45.595	1.888	138.3	-1.21	0.205	-25.07	1.006	1780.5
2000	2.465	34.697	3.80	2.321	27.703	36.887	45.661	1.992	158.5	-0.97	0.124	-17.81	0.848	1977.3
2200	2.275	34.717	3.93	2.117	27.736	36.931	45.715	2.090	179.4	-0.97	0.076	-15.16	0.782	2173.9
2400	2.118	34.728	4.08	1.944	27.758	36.963	45.756	2.183	201.2	-0.94	0.045	-13.10	0.727	2370.3
2600	1.953	34.735	4.23	1.764	27.778	36.992	45.795	2.272	223.9	-0.90	0.020	-11.45	0.680	2566.5
2800	1.785	34.737	4.32	1.581	27.793	37.018	45.830	2.357	247.4	-0.88	-0.001	-10.11	0.639	2762.6
3000	1.611	34.735	4.40	1.392	27.805	37.041	45.863	2.439	271.8	-0.84	-0.006	-9.62	0.623	2958.5
3200	1.474	34.733	4.50	1.238	27.815	37.059	45.889	2.519	296.9	-0.78	-0.017	-8.38	0.582	3154.2
3400	1.338	34.729	4.56	1.086	27.822	37.074	45.913	2.596	322.9	-0.69	-0.021	-7.23	0.540	3349.7
3600	1.232	34.724	4.59	0.962	27.826	37.086	45.931	2.672	349.8	-0.61	-0.026	-6.13	0.498	3545.0
3800	1.140	34.719	4.67	0.852	27.830	37.096	45.947	2.746	377.8	-0.57	-0.022	-5.13	0.497	3740.2
4000	1.061	34.715	4.70	0.754	27.833	37.104	45.961	2.818	406.7	-0.40	-0.018	-4.24	0.414	3935.2
4200	1.010	34.712	4.74	0.683	27.835	37.110	45.971	2.890	436.8	-0.34	-0.014	-3.85	0.394	4130.0
4400	0.978	34.710	4.76	0.630	27.836	37.115	45.978	2.962	468.3	-0.22	-0.009	-2.54	0.320	4324.6
4600	0.960	34.708	4.80	0.590	27.837	37.118	45.984	3.034	501.2	-0.16	-0.008	-1.76	0.266	4519.1
4800	0.960	34.707	4.82	0.567	27.838	37.120	45.987	3.106	536.0	-0.10	-0.005	-1.21	0.221	4713.4
5000	0.967	34.706	4.84	0.551	27.838	37.122	45.989	3.180	572.6	-0.07	-0.004	-0.87	0.187	4907.6
5200	0.980	34.706	4.85	0.539	27.838	37.122	45.990	3.254	611.2	-0.05	-0.003	-0.59	0.154	5101.6
5400	0.998	34.705	4.87	0.532	27.838	37.122	45.991	3.329	652.1	-0.03	-0.002	-0.38	0.123	5295.4
5535	1.011	34.705	4.89	0.527	27.838	37.123	45.992	3.381	688.9	-0.04	-0.005	-0.38	0.000	5426.1

BOTL NO.	PRES DBAR	CTDTEMP IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALTY
24	16.8	17.776	17.773	25.992	34.501	42.643	35.865	35.848	5.53	1.94	0.19	0.10	0.00	2.289	1.279	16	22222222
23	102.4	15.786	15.775	26.375	34.954	43.161	35.746		5.70	1.76	0.24	0.10	0.00	2.386	1.342	101	25222222
22	204.3	12.854	12.826	26.603	35.297	43.611	35.226	35.234	5.67	1.75	0.54	5.90	0.00	2.607	1.404	202	22222222
21	302.0	11.283	11.245	26.685	35.445	43.821	34.940	34.970	5.67	2.58	0.80	10.10	0.00	2.635	1.419	299	22222222
20	398.1	10.106	10.059	26.771	35.583	44.007	34.781	34.779	5.63	3.58	1.00	14.00	0.00	2.470	1.329	394	22222222
19	501.5	9.481	9.424	26.813	35.653	44.104	34.698	34.696	5.49	4.40	1.18	16.70	0.00	2.170	1.232	497	22222222
18	550.1	9.265	9.203	26.829	35.678	44.139	34.672	34.672	5.47	4.73	1.21	17.50	0.00	2.198	1.179	545	22222222
17	598.1	8.865	8.800	26.859	35.727	44.204	34.628	34.625	5.45	5.73	1.31	18.90	0.00	2.030	1.104	592	22222222
16	650.6	8.509	8.482	26.885	35.770	44.263	34.590		5.36	6.89	1.39	20.30	0.00	1.768	0.941	644	25222222
15	700.4	8.072	7.999	26.926	35.830	44.342	34.556	34.545	5.07	9.56	1.55	22.60	0.00	1.256	0.692	693	22222222
14	797.9	6.947	6.924	27.031	35.989	44.551	34.485		4.64	16.19	1.83	26.90	0.00	0.641	0.372	790	25222222
13	900.4	5.504	5.426	27.153	36.181	44.809	34.404	34.410	4.55	26.61	2.07	30.40	0.00	0.392	0.218	891	22222222
12	999.3	4.456	4.377	27.256	36.338	45.015	34.384	34.384	4.47	37.15	2.25	32.60	0.00	0.242	0.137	989	22222222
11	1398.5	3.218	3.117	27.515	36.659	45.396	34.550	34.553	3.55	76.45	2.54	36.30	0.00	0.003	0.000	1383	22222222
10	1800.1	2.655	2.658	27.659	36.833	45.597	34.664		3.71	90.67	2.49	35.30	0.00			1778	25222225
9	2202.9	2.278	2.119	27.735	36.931	45.715	34.717	34.716	3.95	98.21	2.39	33.70	0.00			2174	22222225
8	2600.1	1.938	1.749	27.779	36.994	45.797	34.735	34.737	4.29	100.04	2.28	33.10	0.00			2564	22222225
7	3003.3	1.621	1.616	27.805	37.039	45.861	34.735		4.47	106.74	2.29	33.10	0.00			2959	25222225
6	3506.6	1.286	1.274	27.824	37.080	45.921	34.726		4.64	113.59	2.29	33.10	0.00			3451	25222225
5	4005.9	1.061	0.754	27.832	37.104	45.960	34.715	34.715		119.95	2.29	33.50	0.00			3938	22522225
4	4408.7	0.975	0.626	27.837	37.116	45.979	34.711	34.710	4.81	122.30	2.31	33.60	0.00			4330	22222225
3	4791.2	0.960	0.569	27.837	37.120	45.986	34.707	34.709	4.83	123.47	2.32	33.60	0.00			4701	22222225
2	5216.9	0.981	0.538	27.838	37.123	45.991	34.706	34.708	4.85	123.97	2.31	33.60	0.00			5184	22222225
1	5539.9	1.011	0.527	27.838	37.123	45.992	34.705	34.702	4.82	124.30	2.34	33.50	0.00			5427	22222225

CRUISE: CD 29 STA: 91 DATE (D/M/Y): 11-12-87 TIME: 2207 LAT: 33 14 90 S LONG: 105 0 14 E

GRAVITY= 9.7959 M/S CORIOLIS= -.79961E-04 1/S SOUND SPEED= 1512.3 M/S Depth= 5927 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-MT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.231	35.787	5.31	17.231	26.064	34.593	42.752	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.231	35.787	5.31	17.231	26.064	34.593	42.753	0.002	0.0	-0.33	0.000	0.00	0.000	1.0
20	17.219	35.794	5.39	17.216	26.073	34.602	42.762	0.039	0.0	-15.67	-0.171	-205.64	3.389	19.9
30	16.942	35.780	5.59	16.937	26.129	34.667	42.836	0.058	0.1	-89.74	-9.153	-1117.47	6.704	29.8
40	16.226	35.788	5.71	16.220	26.243	34.806	42.999	0.076	0.2	-29.09	-1.530	-437.19	4.193	39.8
50	15.918	35.687	5.73	15.910	26.298	34.873	43.076	0.094	0.2	-12.92	-1.518	-141.47	2.385	49.7
100	14.766	35.555	5.62	14.751	26.455	35.073	43.316	0.177	0.9	-29.20	-3.838	-272.88	3.313	99.4
125	14.274	35.496	5.62	14.255	26.517	35.153	43.414	0.216	1.3	-1.50	0.790	-73.73	1.722	124.2
150	14.025	35.456	5.61	14.003	26.540	35.186	43.456	0.255	1.9	-10.42	-1.958	-58.56	1.535	149.1
200	13.403	35.341	5.56	13.375	26.582	35.253	43.546	0.331	3.2	-15.69	-2.907	-80.70	1.802	198.7
250	12.557	35.189	5.52	12.524	26.635	35.340	43.666	0.405	4.9	-18.35	-3.238	-93.18	1.936	248.3
300	11.667	35.032	5.59	11.629	26.685	35.429	43.789	0.477	6.9	-19.14	-3.292	-89.81	1.900	298.0
350	10.799	34.887	5.63	10.756	26.732	35.513	43.909	0.548	9.3	-14.63	-2.470	-62.40	1.584	347.6
400	10.241	34.797	5.73	10.194	26.761	35.566	43.985	0.617	11.9	-8.59	-1.341	-40.24	1.272	397.2
450	9.960	34.751	5.68	9.907	26.774	35.592	44.023	0.685	14.9	-5.35	-0.746	-29.44	1.088	446.8
500	9.688	34.715	5.63	9.630	26.792	35.623	44.065	0.753	18.2	-5.47	-0.612	-38.51	1.244	496.3
600	9.188	34.664	5.47	9.121	26.836	35.689	44.153	0.887	25.7	-5.43	-0.631	-35.61	1.197	595.4
700	8.605	34.593	5.44	8.529	26.874	35.754	44.243	1.019	34.4	-7.87	-0.763	-57.77	1.524	694.5
800	7.481	34.509	4.80	7.400	26.976	35.909	44.447	1.146	44.1	-14.99	-0.880	-133.21	2.315	793.5
900	5.822	34.416	4.63	5.742	27.124	36.136	44.750	1.259	53.9	-15.51	-0.725	-131.93	2.303	892.5
1000	4.535	34.382	4.46	4.455	27.246	36.324	44.997	1.357	63.5	-8.35	0.101	-94.76	1.952	991.3
1200	3.675	34.437	4.10	3.585	27.380	36.502	45.217	1.527	82.4	-3.44	0.306	-53.56	1.468	1188.9
1400	3.174	34.528	3.73	3.072	27.501	36.648	45.387	1.674	101.8	-1.36	0.489	-43.84	1.320	1386.3
1600	2.910	34.613	3.60	2.794	27.595	36.755	45.507	1.801	121.3	-1.20	0.385	-36.01	1.203	1583.5
1800	2.665	34.667	3.65	2.536	27.661	36.834	45.598	1.915	141.0	-1.17	0.209	-25.04	1.004	1780.5
2000	2.447	34.699	3.75	2.304	27.706	36.891	45.666	2.018	161.1	-1.01	0.119	-18.06	0.852	1977.3
2200	2.268	34.717	3.87	2.109	27.736	36.932	45.717	2.116	181.9	-0.95	0.065	-14.31	0.759	2173.9
2400	2.098	34.726	3.97	1.924	27.759	36.964	45.759	2.208	203.7	-0.85	0.032	-11.48	0.680	2370.3
2600	1.948	34.731	4.12	1.759	27.775	36.990	45.793	2.298	226.4	-0.82	0.024	-10.80	0.659	2566.6
2800	1.817	34.736	4.28	1.612	27.790	37.013	45.823	2.384	250.2	-0.81	0.012	-10.18	0.640	2762.6
3000	1.684	34.734	4.35	1.444	27.801	37.033	45.853	2.468	274.9	-0.83	-0.017	-8.76	0.593	2958.5
3200	1.535	34.733	4.45	1.297	27.811	37.051	45.878	2.549	300.6	-0.80	-0.012	-8.94	0.599	3154.2
3400	1.387	34.730	4.56	1.134	27.820	37.070	45.905	2.627	327.0	-0.77	-0.022	-8.24	0.578	3349.7
3600	1.253	34.725	4.63	0.983	27.826	37.084	45.928	2.704	354.2	-0.67	-0.028	-6.89	0.526	3545.0
3800	1.147	34.719	4.66	0.858	27.829	37.095	45.945	2.778	382.3	-0.64	-0.027	-6.74	0.521	3740.2
4000	1.073	34.716	4.71	0.766	27.832	37.103	45.959	2.851	411.3	-0.41	-0.017	-4.45	0.423	3935.2
4200	1.012	34.712	4.74	0.685	27.834	37.110	45.970	2.923	441.5	-0.38	-0.016	-4.24	0.413	4130.0
4400	0.968	34.709	4.78	0.621	27.836	37.115	45.979	2.995	473.0	-0.27	-0.011	-3.04	0.350	4324.7
4600	0.951	34.708	4.81	0.582	27.837	37.119	45.985	3.067	505.9	-0.17	-0.008	-1.98	0.282	4519.2
4800	0.949	34.707	4.83	0.556	27.838	37.121	45.988	3.139	540.5	-0.10	-0.004	-1.28	0.227	4713.5
5000	0.953	34.706	4.85	0.537	27.838	37.122	45.991	3.212	576.9	-0.07	-0.003	-0.94	0.195	4907.6
5200	0.971	34.705	4.88	0.531	27.838	37.123	45.991	3.286	615.4	-0.04	-0.001	-0.60	0.155	5101.6
5400	0.986	34.705	4.88	0.520	27.838	37.124	45.993	3.361	656.1	-0.07	-0.004	-0.82	0.182	5295.4
5600	1.004	34.704	4.90	0.513	27.838	37.124	45.994	3.437	699.0	-0.01	-0.001	-0.16	0.079	5489.1
5800	1.028	34.704	4.91	0.511	27.838	37.124	45.994	3.515	744.3	-0.01	-0.002	-0.09	0.059	5682.5
6000	1.050	34.703	4.94	0.505	27.838	37.124	45.994	3.595	792.1	-0.04	-0.002	-0.09	0.000	5875.9
6053	1.057	34.703	4.92	0.505	27.838	37.124	45.994	3.616	805.2	-1.66	-0.015	-0.09	0.000	5927.1

BOTL NO.	PRES DBAR	CTDTPM IPTS68	THETA IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	1.7	17.378	17.378	25.197	33.734	41.902	34.703	35.796	5.54	1.59	0.20	0.00	0.00	2.300	1.278	1	22222222
23	103.5	14.532	14.523	26.501	35.127	43.378	35.548		5.71	1.26	0.28	0.00	0.00	2.436	1.319	102	25222222
22	199.6	13.365	13.349	26.592	35.265	43.559	35.345		5.57	1.77	0.51	4.80	0.00	2.447	1.369	197	25222222
21	300.7	11.636	11.616	26.687	35.431	43.793	35.027		5.62	2.11	0.75	9.00	0.00			298	25222255
20	400.2	10.377	10.329	26.736	35.536	43.950	34.796	34.815	5.74	3.30	0.95	12.50	0.00	2.596	1.441	396	22222222
19	500.2	9.720	9.682	26.787	35.616	44.057	34.715	34.716	5.59	4.14	1.13	15.50	0.00	2.342	1.336	495	22222222
18	600.8	9.230	9.163	26.828	35.680	44.142	34.663	34.667	5.46	4.99	1.27	17.70	0.00			595	22222255
17	701.7	8.616	8.540	26.872	35.752	44.241	34.593	34.592	5.40	6.34	1.40	19.80	0.00	1.811	1.032	695	22222222
16	803.3	7.339	7.259	26.994	35.933	44.477	34.506	34.499	4.71	14.58	1.77	25.60	0.00			795	22222255
15	901.6	5.635	5.556	27.147	36.189	44.791	34.417	34.405	4.54	25.66	2.09	30.00	0.00	0.392	0.252	892	22222222
14	1000.1	4.495	4.415	27.251	36.330	45.006	34.382	34.380	4.45	37.42	2.27	32.40	0.00	0.227	0.149	990	22222222
13	1401.8	3.186	3.187	27.501	36.647	45.385	34.528		3.64	73.85	2.57	35.90	0.00			1386	25222255
12	1801.0	2.672	2.543	27.660	36.833	45.596	34.667	34.665	3.59	93.17	2.52	35.40	0.00			1779	22222255
11	2200.5	2.263	2.105	27.737	36.932	45.718	34.717	34.716	3.84	103.09	2.46	34.40	0.00			2172	22222255
10	2600.7	1.951	1.762	27.775	36.989	45.792	34.731	34.730	4.11	106.96	2.38	33.60	0.00			2564	22222255
9	3002.7	1.662	1.441	27.802	37.034	45.854	34.735	34.731	4.47	109.66	2.35	33.00	0.00			2958	22222255
8	3406.8	1.380	1.126	27.820	37.070	45.906	34.730	34.729	4.61	111.86	2.33	32.80	0.00			3353	22222255
7	3807.7	1.144	0.855	27.829	37.095	45.946	34.719	34.722	4.68	118.75	2.33	33.20	0.00			3744	22222255
6	4210.1	1.012	0.684	27.834	37.110	45.970	34.712	34.711	4.77	121.96	2.32	33.20	0.00			4136	22222255
5	4608.7	0.952	0.581	27.837	37.119	45.985	34.708	34.708	4.81	123.99	2.33	33.50	0.00			4524	22222255
4	5014.8	0.957	0.539	27.838	37.122	45.990	34.705	34.704	4.83	124.84	2.34	33.40	0.00			4918	22222255
3	5314.0	0.980	0.526	27.838	37.123	45.992	34.705	34.703	4.82	125.02	2.35	33.40	0.00			5208	22222255
2	5613.0	1.006	0.513	27.838	37.124	45.994	34.704	34.701	4.83	125.04	2.33	33.30	0.00	0.006	0.000	5490	22222222
1	6036.5	1.057	0.505	27.838	37.124	45.994	34.703	34.703	4.82	125.22	2.33	33.20	0.00	0.005	0.000	5926	22222222

CRUISE: CD 29 STA: 92 DATE (D/M/Y): 12-12-87 TIME: 0646 LAT: 33 26.35 S LONG: 185 44.89 E

GRAVITY= 9.7960 M/S CORIOLIS= - .80366E-04 1/S SOUND SPEED= 1507.9 M/S Depth= 5415 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HI	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.553	35.821	5.22	17.553	26.012	34.529	42.679	0.030	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.553	35.821	5.22	17.553	26.012	34.529	42.679	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.155	35.820	5.52	17.152	26.108	34.639	42.801	0.039	0.0	-20.68	0.147	-401.11	4.006	19.9
30	17.081	35.830	5.57	17.076	26.134	34.667	42.831	0.058	0.1	-10.60	-1.054	-136.61	2.338	29.8
40	16.995	35.824	5.53	16.988	26.151	34.687	42.853	0.077	0.2	-9.84	-0.618	-148.21	2.435	39.8
50	16.880	35.819	5.62	16.872	26.174	34.714	42.885	0.095	0.2	-22.04	-2.061	-289.02	3.401	49.7
100	15.119	35.605	5.53	15.104	26.417	35.021	43.251	0.182	0.9	-24.80	-3.379	-232.08	3.047	99.4
125	14.626	35.539	5.60	14.607	26.475	35.097	43.345	0.222	1.4	-18.71	-2.840	-148.03	2.434	124.2
150	14.148	35.456	5.41	14.126	26.514	35.156	43.421	0.261	1.9	-10.40	-1.718	-71.62	1.693	149.1
200	13.677	35.377	5.47	13.649	26.553	35.213	43.496	0.338	3.3	-14.57	-2.541	-86.75	1.863	198.7
250	12.775	35.217	5.60	12.741	26.614	35.311	43.628	0.414	5.0	-14.89	-2.569	-82.02	1.812	248.4
300	11.968	35.077	5.53	11.928	26.663	35.394	43.743	0.487	7.1	-19.23	-3.270	-97.19	1.972	298.0
350	11.145	34.942	5.57	11.102	26.712	35.478	43.860	0.558	9.4	-15.11	-2.364	-80.40	1.794	347.6
400	10.462	34.836	5.64	10.414	26.753	35.548	43.958	0.628	12.1	-10.13	-1.511	-53.71	1.466	397.2
450	9.968	34.760	5.58	9.915	26.779	35.597	44.028	0.696	15.1	-8.81	-1.273	-46.38	1.362	446.8
500	9.615	34.715	5.55	9.558	26.804	35.638	44.084	0.764	18.3	-6.66	-0.787	-44.32	1.332	496.3
600	8.967	34.638	5.45	8.901	26.851	35.714	44.187	0.897	25.8	-7.50	-0.893	-46.42	1.363	595.5
700	8.182	34.556	5.13	8.109	26.910	35.809	44.316	1.026	34.3	-10.05	-0.757	-83.41	1.827	694.5
800	6.923	34.477	4.67	6.846	27.028	35.987	44.550	1.147	43.6	-14.63	-0.838	-124.47	2.232	793.5
900	5.248	34.399	4.52	5.172	27.179	36.219	44.859	1.254	52.9	-13.37	-0.448	-119.51	2.187	892.5
1000	4.303	34.406	4.25	4.225	27.290	36.379	45.063	1.347	61.9	-5.19	0.527	-86.63	1.862	991.3
1200	3.583	34.487	3.79	3.494	27.429	36.554	45.273	1.509	79.9	-2.30	0.460	-51.84	1.440	1188.9
1400	3.223	34.565	3.56	3.121	27.527	36.670	45.406	1.649	98.5	-2.16	0.283	-39.42	1.256	1386.3
1600	2.856	34.623	3.61	2.741	27.608	36.770	45.525	1.773	117.5	-1.46	0.275	-32.01	1.132	1583.5
1800	2.635	34.670	3.67	2.506	27.666	36.841	45.606	1.884	136.8	-1.10	0.204	-24.06	0.981	1780.5
2000	2.426	34.701	3.74	2.283	27.709	36.896	45.672	1.987	156.6	-1.02	0.101	-17.15	0.828	1977.3
2200	2.233	34.718	3.84	2.076	27.740	36.937	45.724	2.083	177.2	-0.93	0.053	-13.43	0.733	2173.9
2400	2.079	34.725	3.93	1.907	27.759	36.966	45.761	2.175	198.8	-0.85	0.024	-11.03	0.664	2370.3
2600	1.942	34.729	4.02	1.753	27.773	36.989	45.792	2.264	221.6	-0.78	0.015	-9.83	0.627	2566.5
2800	1.808	34.734	4.27	1.603	27.789	37.013	45.824	2.351	245.4	-0.64	0.042	-10.11	0.636	2762.6
3000	1.682	34.736	4.40	1.461	27.801	37.032	45.851	2.435	270.2	-0.84	0.000	-10.03	0.634	2958.5
3200	1.559	34.736	4.51	1.321	27.811	37.050	45.876	2.516	296.0	-0.75	-0.015	-8.13	0.570	3154.2
3400	1.412	34.730	4.56	1.158	27.818	37.066	45.901	2.595	322.6	-0.69	-0.017	-7.50	0.548	3349.7
3600	1.284	34.726	4.63	1.012	27.825	37.081	45.924	2.672	350.0	-0.68	-0.031	-6.79	0.521	3545.0
3800	1.176	34.721	4.68	0.887	27.829	37.093	45.942	2.748	378.4	-0.53	-0.017	-5.81	0.482	3740.2
4000	1.103	34.717	4.70	0.795	27.831	37.101	45.955	2.821	407.8	-0.50	-0.020	-5.54	0.471	3935.2
4200	1.040	34.713	4.74	0.712	27.833	37.108	45.966	2.894	438.3	-0.40	-0.017	-4.43	0.421	4130.0
4400	0.993	34.710	4.79	0.645	27.835	37.113	45.976	2.967	470.0	-0.31	-0.013	-3.56	0.378	4324.6
4600	0.967	34.708	4.81	0.597	27.837	37.117	45.982	3.039	503.2	-0.22	-0.010	-2.57	0.320	4519.1
4800	0.949	34.706	4.85	0.557	27.837	37.120	45.987	3.111	537.9	-0.14	-0.008	-1.54	0.249	4713.4
5000	0.953	34.705	4.86	0.538	27.838	37.122	45.991	3.184	574.4	-0.12	-0.006	-1.47	0.242	4907.6
5200	0.961	34.704	4.88	0.521	27.838	37.123	45.992	3.258	612.9	-0.10	-0.005	-1.21	0.220	5101.6
5400	0.974	34.704	4.86	0.509	27.838	37.124	45.994	3.333	653.4	-0.03	-0.001	-1.21	0.000	5295.4
5417	0.975	34.704	4.89	0.508	27.839	37.125	45.995	3.340	656.9	-0.03	-0.002	-1.21	0.000	5311.8

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	2.2	18.818	18.818	24.842	33.333	41.457	34.704	35.890	5.48	1.72		0.00	0.00			2	22252255
23	182.4	15.053	15.037	26.419	35.025	43.258	35.589	35.590	5.54	1.23		1.60	0.00			101	22252255
22	202.2	13.715	13.606	26.538	35.197	43.479	35.368	35.387	5.58	1.40		3.70	0.00			200	22252255
21	300.4	12.157	12.117	26.625	35.348	43.690	35.074	35.119	5.60	1.74		7.60	0.00			297	22252255
20	402.2	10.403	10.354	26.762	35.560	43.972	34.834	34.824	5.63	3.07		12.60	0.00			398	22252255
19	501.0	9.584	9.527	26.809	35.644	44.091	34.715	34.709	5.45	3.91		16.20	0.00			496	22252255
18	599.8	8.941	8.875	26.856	35.720	44.194	34.639	34.637	5.37	5.07		18.50	0.00			594	22252255
17	701.1	8.062	7.989	26.926	35.831	44.344	34.555	34.549	5.02	9.39		22.50	0.00			694	22252255
16	800.8	6.725	6.649	27.054	36.022	44.594	34.476	34.468	4.56	17.86		27.50	0.00			793	22252255
15	900.8	5.159	5.083	27.188	36.234	44.878	34.398	34.396	4.45	30.47		31.30	0.00			891	22252255
14	1387.1	3.242	3.141	27.522	36.664	45.399	34.561	34.562	3.49	78.07		36.30	0.00			1371	22252255
13	2000.7	2.431	2.434	27.709	36.895	45.671	34.701		3.71	98.62		35.00	0.00			1975	252252255
12	2200.9	2.240	2.082	27.739	36.936	45.723	34.718	34.722	3.79	104.06		34.70	0.00			2172	22252255
11	2398.3	2.080	1.907	27.759	36.965	45.761	34.725	34.725	3.90	107.68		34.60	0.00			2366	22252255
10	2603.0	1.933	1.744	27.774	36.989	45.793	34.728	34.729	4.02	109.48		34.20	0.00			2567	22252255
9	2779.8	1.828	1.625	27.788	37.010	45.819	34.734	34.729	4.37	109.12		33.30	0.00			2740	22252255
8	3001.1	1.691	1.470	27.801	37.031	45.849	34.736	34.740	4.44	103.13		32.60	0.00			2957	22252255
7	3202.6	1.555	1.546	27.811	37.051	45.877	34.736		4.53	105.92		32.70	0.00			3154	252252255
6	3505.8	1.355	1.091	27.822	37.074	45.912	34.729	34.729	4.61	110.86		32.90	0.00			3450	22252255
5	3908.4	1.143	1.118	27.830	37.096	45.948	34.719		4.69	116.96		33.20	0.00			3843	22252255
4	4296.6	1.013	0.676	27.835	37.111	45.972	34.712	34.713	4.77	120.56		33.30	0.00			4221	22252255
3	4711.3	0.962	0.580	27.837	37.119	45.984	34.707	34.708	4.79	122.51		33.40	0.00			4624	22252255
2	5112.9	0.957	0.527	27.838	37.123	45.992	34.705	34.705	4.82	123.14		33.40	0.00			5013	22252255
1	5422.4	0.976	0.508	27.839	37.125	45.994	34.704	34.700	4.82	123.45		33.30	0.00			5313	22252255

CRUISE: CD 29 STA: 93 DATE (D/M/Y): 12-12-87 TIME: 1524 LAT: 33 39.61 S LONG: 106 29.47 E

GRAVITY= 9.7962 M/S CORIOLIS= -.80835E-04 1/S SOUND SPEED= 1509.0 M/S Depth= 5514 Cor Meters

PRES DBAR	TMP IPTS68	SALT PSS78	OXYG ML/L	PTMP IPTS68	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-TH DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	18.795	35.931	5.28	18.795	25.787	34.263	42.373	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.795	35.931	5.28	18.794	25.787	34.263	42.373	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.553	35.933	5.49	18.549	25.850	34.334	42.452	0.044	0.0	-3.55	0.242	-85.88	1.848	19.9
30	18.515	35.933	5.52	18.509	25.860	34.345	42.464	0.065	0.1	-11.13	-0.451	-195.25	2.787	29.8
40	18.397	35.928	5.61	18.390	25.887	34.376	42.499	0.086	0.2	-7.02	-0.256	-124.58	2.226	39.8
50	18.311	35.924	5.53	18.302	25.906	34.398	42.523	0.107	0.3	-15.08	-0.737	-255.40	3.188	49.7
100	16.469	35.773	5.74	16.453	26.238	34.793	42.977	0.206	1.0	-36.81	-3.632	-467.74	4.314	99.4
125	15.713	35.694	5.66	15.693	26.353	34.935	43.145	0.249	1.5	-23.43	-2.795	-255.22	3.186	124.3
150	15.095	35.604	5.49	15.073	26.422	35.027	43.259	0.291	2.1	-32.75	-5.690	-225.34	2.994	149.1
200	13.626	35.362	5.11	13.598	26.552	35.215	43.500	0.370	3.5	-25.24	-3.828	-186.51	2.724	198.7
250	12.503	35.181	5.37	12.470	26.639	35.347	43.675	0.445	5.2	-17.13	-2.819	-99.43	1.989	248.4
300	11.545	35.021	5.59	11.507	26.699	35.447	43.813	0.517	7.2	-15.09	-2.506	-76.36	1.743	298.0
350	10.967	34.923	5.60	10.923	26.730	35.503	43.892	0.587	9.6	-13.07	-2.150	-61.33	1.562	347.6
400	10.335	34.819	5.59	10.288	26.761	35.562	43.977	0.656	12.2	-10.58	-1.662	-50.17	1.413	397.2
450	9.831	34.742	5.56	9.779	26.788	35.612	44.048	0.724	15.1	-7.58	-1.035	-43.01	1.308	446.8
500	9.503	34.703	5.50	9.446	26.813	35.652	44.102	0.791	18.4	-6.36	-0.696	-45.43	1.344	496.4
600	8.854	34.624	5.46	8.788	26.858	35.726	44.204	0.923	25.8	-7.14	-0.807	-46.11	1.354	595.5
700	7.954	34.544	4.98	7.882	26.934	35.844	44.361	1.051	34.3	-13.54	-0.942	-114.52	2.135	694.5
800	6.211	34.439	4.56	6.139	27.092	36.085	44.680	1.167	43.1	-15.39	-0.810	-130.13	2.275	793.5
900	5.037	34.402	4.37	4.962	27.206	36.257	44.906	1.269	51.9	-8.38	0.081	-95.77	1.952	892.5
1000	4.306	34.417	4.13	4.228	27.299	36.387	45.071	1.360	60.8	-7.59	0.145	-87.67	1.868	991.3
1200	3.568	34.492	3.73	3.480	27.435	36.560	45.280	1.518	78.5	-2.33	0.401	-48.58	1.390	1188.9
1400	3.019	34.552	3.72	2.920	27.535	36.689	45.436	1.656	96.7	-1.80	0.353	-40.30	1.266	1386.3
1600	2.755	34.621	3.74	2.641	27.614	36.783	45.542	1.777	115.2	-1.18	0.332	-32.78	1.142	1583.5
1800	2.567	34.673	3.76	2.439	27.674	36.852	45.621	1.886	134.1	-1.03	0.209	-23.75	0.972	1780.5
2000	2.367	34.706	3.78	2.225	27.718	36.907	45.687	1.987	153.6	-1.08	0.113	-18.66	0.862	1977.3
2200	2.190	34.721	3.88	2.033	27.746	36.945	45.734	2.081	173.8	-0.82	0.042	-11.60	0.679	2173.9
2400	2.057	34.727	3.98	1.884	27.762	36.970	45.766	2.172	195.1	-0.74	0.027	-9.98	0.630	2370.3
2600	1.914	34.730	4.07	1.726	27.777	36.993	45.798	2.260	217.6	-0.80	0.004	-9.37	0.611	2566.5
2800	1.768	34.731	4.19	1.564	27.790	37.016	45.829	2.345	241.1	-0.73	0.004	-8.75	0.590	2762.6
3000	1.650	34.731	4.24	1.430	27.800	37.033	45.853	2.429	265.8	-0.64	-0.007	-7.20	0.535	2958.4
3200	1.549	34.732	4.37	1.311	27.809	37.048	45.875	2.510	291.6	-0.63	0.000	-7.74	0.555	3154.1
3400	1.419	34.729	4.47	1.164	27.816	37.065	45.899	2.590	318.4	-0.64	0.002	-8.20	0.571	3349.7
3600	1.306	34.727	4.61	1.034	27.824	37.079	45.920	2.668	346.1	-0.66	-0.023	-7.03	0.529	3545.0
3800	1.202	34.722	4.68	0.912	27.828	37.090	45.938	2.743	374.6	-0.61	-0.028	-6.38	0.504	3740.2
4000	1.116	34.718	4.69	0.807	27.831	37.100	45.953	2.817	404.1	-0.52	-0.023	-5.59	0.471	3935.2
4200	1.023	34.713	4.75	0.696	27.834	37.109	45.969	2.890	434.7	-0.51	-0.020	-5.78	0.479	4130.0
4400	0.971	34.709	4.78	0.623	27.836	37.115	45.979	2.962	466.2	-0.25	-0.009	-2.97	0.344	4324.6
4600	0.945	34.708	4.80	0.576	27.837	37.120	45.986	3.034	499.1	-0.24	-0.009	-2.90	0.339	4519.1
4800	0.949	34.707	4.83	0.557	27.838	37.121	45.988	3.106	533.7	-0.09	-0.004	-1.09	0.209	4713.4
5000	0.948	34.705	4.86	0.532	27.838	37.123	45.991	3.179	570.1	-0.12	-0.005	-1.50	0.245	4907.6
5200	0.961	34.705	4.87	0.520	27.838	37.124	45.993	3.253	608.5	-0.04	-0.003	-0.43	0.131	5101.6
5400	0.981	34.704	4.89	0.516	27.838	37.124	45.993	3.328	649.0	-0.02	-0.001	-0.25	0.099	5295.4
5600	1.005	34.704	4.91	0.514	27.838	37.124	45.994	3.404	691.9	-0.01	0.004	-0.25	0.000	5489.0
5607	1.006	34.704	4.89	0.514	27.838	37.124	45.994	3.407	693.5	-0.01	0.004	-0.25	0.000	5495.8

BOTL NO.	PRES DBAR	CTD IPTS68	TEMP IPTS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
24	15.2	18.556	18.554	25.847	34.331	42.448	35.930	35.937	5.41	1.30	0.12	0.00	0.00				15	222222255
23	101.1	16.129	16.113	26.318	34.884	43.080	35.774	35.746	5.69	0.47	0.20	0.00	0.00				100	222222255
22	199.0	13.630	13.602	26.553	35.215	43.500	35.365	35.359	5.34	1.16	0.50	5.60	0.00				197	222222255
21	300.1	11.415	11.377	26.721	35.474	43.845	35.018	34.997	5.61	1.85	0.76	9.80	0.00				297	222222255
20	400.2	10.314	10.268	26.762	35.564	43.980	34.815	34.815	5.62	2.53	0.92	12.70	0.00				396	222222255
19	499.7	9.520	9.463	26.811	35.648	44.098	34.703	34.703	5.50	3.56	1.12	16.10	0.00				495	222222255
18	602.9	8.905	8.839	26.849	35.715	44.191	34.623	34.633	5.45	4.76	1.26	18.30	0.00				597	222222255
17	698.3	8.027	7.954	26.924	35.831	44.345	34.546	34.545	4.99	9.34	1.54	22.40	0.00				691	222222255
16	802.4	6.380	6.306	27.069	36.054	44.642	34.438	34.447	4.54	20.02	1.91	27.60	0.00				794	222222255
15	901.7	5.111	5.036	27.196	36.244	44.890	34.401	34.398	4.41	32.39	2.18	30.90	0.00				892	222222255
14	996.9	4.218	4.213	27.309	36.401	45.090	34.418		4.13	47.13	2.32	33.10	0.00				986	252222255
13	1499.7	2.852	2.746	27.578	36.741	45.495	34.586	34.590	3.69	80.33	2.48	35.00	0.00				1482	222222255
12	1999.6	2.361	2.218	27.719	36.900	45.688	34.706	34.706	3.78	100.66	2.43	34.10	0.00				1974	222222255
11	2201.2	2.194	2.036	27.745	36.945	45.733	34.721	34.716	3.86	106.60	2.43	33.90	0.00				2172	222222255
10	2402.9	2.043	1.870	27.764	36.973	45.770	34.728	34.728	3.96	108.31	2.39	33.50	0.00				2370	222222255
9	2600.7	1.897	1.709	27.777	36.995	45.800	34.729	34.732	4.11	110.18	2.38	33.30	0.00				2564	222222255
8	2802.1	1.772	1.568	27.789	37.015	45.828	34.731	34.730	4.20	112.40	2.36	33.00	0.00				2762	222222255
7	3003.4	1.646	1.425	27.800	37.033	45.853	34.731	34.733	4.28	113.77	2.33	32.90	0.00				2959	222222255
6	3506.5	1.352	1.089	27.822	37.074	45.912	34.729	34.730	4.65	113.28	2.28	32.30	0.00				3451	222222255
5	4006.5	1.109	0.800	27.831	37.100	45.954	34.717	34.716	4.74	120.74	2.29	32.70	0.00				3938	222222255
4	4510.2	0.958	0.599	27.837	37.118	45.983	34.709	34.712	4.80	125.16	2.30	32.00	0.00				4428	222222255
3	5014.0	0.952	0.535	27.838	37.122	45.991	34.705	34.705	4.82	125.85	2.31	32.90	0.00				4917	222222255
2	5314.1	0.973	0.518	27.838	37.123	45.993	34.704	34.706	4.83	126.20	2.31	33.00	0.00				5208	222222255
1	5611.2	1.006	0.514	27.838	37.124	45.994	34.704	34.703	4.83	126.39	2.30	33.10	0.00				5496	222222255

CRUISE: CD 29 STA: 94 DATE (D/M/Y): 13-12-87 TIME: 0013 LAT: 33 53.66 S LONG: 107 13.45 E

GRAVITY= 9.7964 M/S CORIOLIS= -.81331E-04 1/S SOUND SPEED= 1507.8 M/S Depth= 5302 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	1/DB 10-3	(m s)-1 10-12	CPH	METERS
0	17.882	35.890	5.42	17.882	25.984	34.490	42.628	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.882	35.890	5.42	17.882	25.984	34.490	42.628	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.899	35.892	5.38	17.895	25.983	34.488	42.626	0.040	0.0	-2.68	0.098	-58.86	1.526	19.9
30	17.841	35.891	5.52	17.836	25.996	34.504	42.643	0.061	0.1	-3.89	-0.051	-73.47	1.704	29.8
40	17.788	35.888	5.46	17.781	26.008	34.517	42.658	0.081	0.2	-28.62	-1.540	-466.92	4.297	39.8
50	17.427	35.869	5.49	17.418	26.081	34.602	42.755	0.100	0.3	-34.47	-2.240	-531.55	4.585	49.7
100	16.691	35.791	5.52	16.674	26.200	34.747	42.924	0.195	1.0	-37.07	-3.862	-459.44	4.262	99.4
125	15.626	35.677	5.35	15.606	26.359	34.944	43.157	0.239	1.5	-36.06	-4.617	-371.45	3.832	124.2
150	14.920	35.579	5.50	14.898	26.442	35.054	43.291	0.280	2.1	-24.88	-4.219	-178.53	2.657	149.1
200	13.600	35.370	5.50	13.572	26.563	35.226	43.512	0.359	3.5	-28.63	-4.939	-175.71	2.636	198.7
250	12.307	35.140	5.43	12.273	26.646	35.362	43.698	0.434	5.2	-24.06	-3.999	-133.78	2.300	288.4
300	11.270	34.969	5.54	11.232	26.710	35.470	43.846	0.505	7.2	-13.57	-2.217	-68.24	1.643	298.0
350	10.781	34.890	5.56	10.738	26.737	35.519	43.915	0.574	9.5	-12.75	-2.057	-60.79	1.550	347.6
400	10.245	34.804	5.60	10.197	26.765	35.570	43.989	0.643	12.1	-8.65	-1.315	-43.28	1.308	397.2
450	9.884	34.750	5.52	9.832	26.786	35.607	44.041	0.711	15.0	-6.39	-0.872	-36.63	1.203	446.8
500	9.590	34.714	5.51	9.533	26.808	35.643	44.089	0.778	18.3	-5.69	-0.652	-39.53	1.250	496.4
600	9.030	34.646	5.44	8.964	26.847	35.707	44.178	0.911	25.8	-7.45	-0.909	-45.22	1.337	595.5
700	8.182	34.561	5.06	8.108	26.913	35.813	44.320	1.041	34.3	-10.93	-0.769	-94.71	1.935	694.5
800	6.763	34.473	4.64	6.687	27.046	36.013	44.583	1.161	43.5	-15.24	-0.878	-130.85	2.275	793.5
900	5.365	34.399	4.51	5.229	27.172	36.210	44.848	1.267	52.7	-13.20	-0.465	-118.05	2.161	892.5
1000	4.337	34.390	4.37	4.259	27.274	36.361	45.044	1.361	61.8	-5.33	0.487	-86.87	1.853	991.3
1200	3.541	34.468	3.91	3.452	27.418	36.545	45.266	1.524	80.1	-2.34	0.443	-51.97	1.434	1188.9
1400	3.215	34.553	3.61	3.113	27.518	36.663	45.399	1.665	98.8	-2.32	0.268	-40.54	1.266	1386.3
1600	2.798	34.611	3.70	2.684	27.603	36.769	45.527	1.790	117.8	-1.14	0.318	-31.86	1.122	1583.5
1800	2.606	34.665	3.73	2.477	27.664	36.841	45.608	1.902	137.2	-1.15	0.237	-26.96	1.033	1780.5
2000	2.439	34.698	3.75	2.295	27.706	36.892	45.668	2.005	157.1	-0.95	0.119	-17.67	0.836	1977.3
2200	2.236	34.718	3.80	2.078	27.740	36.937	45.724	2.101	177.7	-0.90	0.051	-13.08	0.719	2173.9
2400	2.083	34.726	3.95	1.910	27.759	36.966	45.761	2.193	199.3	-0.83	0.024	-10.90	0.657	2370.3
2600	1.937	34.729	4.01	1.748	27.774	36.990	45.793	2.282	222.0	-0.81	0.011	-10.07	0.631	2566.5
2800	1.814	34.732	4.14	1.609	27.787	37.010	45.821	2.369	245.8	-0.64	0.009	-8.04	0.564	2762.6
3000	1.694	34.733	4.28	1.473	27.798	37.029	45.846	2.453	270.9	-0.72	-0.001	-8.75	0.588	2958.5
3200	1.574	34.730	4.31	1.336	27.806	37.044	45.869	2.536	297.0	-0.68	-0.006	-8.03	0.563	3154.2
3400	1.465	34.729	4.43	1.209	27.814	37.059	45.891	2.616	324.1	-0.62	-0.010	-7.30	0.537	3349.7
3600	1.356	34.726	4.48	1.083	27.819	37.072	45.911	2.695	352.3	-0.60	-0.026	-6.25	0.497	3545.0
3800	1.280	34.722	4.51	0.988	27.823	37.081	45.925	2.773	381.6	-0.49	-0.006	-6.18	0.494	3740.2
4000	1.200	34.719	4.58	0.890	27.827	37.091	45.940	2.850	412.0	-0.50	-0.015	-5.90	0.483	3935.2
4200	1.138	34.717	4.67	0.808	27.830	37.099	45.952	2.925	443.6	-0.44	-0.016	-5.16	0.452	4130.0
4400	1.068	34.713	4.73	0.718	27.833	37.107	45.965	3.000	476.4	-0.43	-0.016	-5.11	0.449	4324.7
4600	1.010	34.710	4.77	0.639	27.835	37.114	45.976	3.074	510.2	-0.37	-0.016	-4.39	0.416	4519.2
4800	0.972	34.707	4.81	0.579	27.837	37.119	45.985	3.147	545.3	-0.21	-0.008	-2.68	0.325	4713.5
5000	0.960	34.706	4.84	0.544	27.838	37.122	45.990	3.220	581.9	-0.16	-0.006	-2.03	0.283	4907.6
5200	0.956	34.705	4.86	0.516	27.839	37.124	45.993	3.294	620.4	-0.12	-0.006	-1.50	0.244	5101.6
5385	0.969	34.704	4.90	0.506	27.839	37.125	45.995	3.363	657.7	-0.04	-0.003	-1.50	0.000	5280.9

BOTL NO.	PRES DBAR	CTD TPS68	TMP TPS68	THETA	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	**	**	**	**	**	**	**	**	**	DEPTH METERS	QUALT1
								CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG		
24	13.4	17.903	17.901	25.980	34.485	42.623	35.891	35.893	5.48	1.97	0.12	0.10	0.00	2.182	1.174	13	22222222	
23	101.9	15.719	15.708	26.418	34.999	43.207	35.782		5.50	0.91	0.22	0.70	0.00	2.150	1.188	101	25222222	
22	201.2	13.495	13.466	26.582	35.249	43.539	35.366	35.350	5.54	1.23	0.45	4.50	0.00	2.530	1.325	199	22222222	
21	300.2	11.248	11.210	26.714	35.475	43.852	34.969	34.963	5.62	2.57	0.77	10.00	0.00			297	22222255	
20	401.3	10.030	9.983	26.801	35.616	44.043	34.803	34.771	5.64	3.74	0.92	13.60	0.00	2.586	1.282	397	22222222	
19	501.4	9.404	9.347	26.838	35.680	44.134	34.713	34.686	5.46	4.05	1.03	16.50	0.00	1.971	1.095	496	22222222	
18	601.1	8.752	8.687	26.889	35.762	44.244	34.644	34.611	5.47	5.56	1.05	18.70	0.00	1.891	0.997	595	22222222	
17	700.9	8.074	8.001	26.928	35.833	44.345	34.560	34.552	5.06	11.15	1.35	22.10	0.00	1.205	0.665	694	22222222	
16	800.0	6.685	6.610	27.058	36.028	44.601	34.474	34.464	4.58	19.47	1.71	27.10	0.00	0.505	0.290	792	22222222	
15	899.3	5.222	5.147	27.183	36.225	44.866	34.400	34.396	4.52	30.34	2.03	30.30	0.00	0.314	0.174	890	22222222	
14	1000.5	4.347	4.268	27.273	36.359	45.042	34.390	34.386	4.29	43.08	2.19	32.40	0.00	0.175	0.142	990	22222222	
13	1199.9	3.597	3.508	27.411	36.536	45.254	34.466	34.482	3.73	65.91	2.44	35.00	0.00	0.057	0.000	1187	22222222	
12	1396.0	3.201	3.099	27.518	36.663	45.400	34.551	34.550	3.58	77.75	2.48	35.40	0.00			1380	22222255	
11	1800.0	2.602	2.474	27.664	36.841	45.608	34.665	34.665	3.72	92.35	2.42	34.60	0.00			1778	22222255	
10	2196.7	2.237	2.080	27.740	36.937	45.724	34.719	34.716	3.79	109.67	2.39	34.30	0.00			2168	22222255	
9	2602.0	1.940	1.751	27.774	36.989	45.793	34.729	34.728	4.03	113.20	2.32	33.70	0.00	0.000	0.000	2566	22222222	
8	3002.1	1.693	1.472	27.798	37.029	45.847	34.733	34.732	4.30	112.81	2.26	33.80	0.00			2958	22222255	
7	3405.3	1.475	1.219	27.813	37.058	45.889	34.729	34.731	4.53	113.44	2.26	32.90	0.00			3352	22222255	
6	3801.3	1.280	0.988	27.823	37.081	45.925	34.722	34.722	4.64	110.65	2.27	33.00	0.00			3738	22222255	
5	4195.8	1.145	0.815	27.830	37.098	45.951	34.717	34.715	4.69	121.67	2.30	33.40	0.00			4122	22222255	
4	4611.0	1.004	0.632	27.836	37.115	45.978	34.710	34.709	4.80	125.01	2.33	33.50	0.00			4526	22222255	
3	4913.1	0.962	0.556	27.837	37.121	45.988	34.706	34.705	4.83	125.99	2.34	33.60	0.00			4820	22222255	
2	5112.6	0.959	0.529	27.838	37.123	45.992	34.705	34.704	4.83	126.27	2.34	33.60	0.00			5013	22222255	
1	5391.8	0.968	0.504	27.839	37.125	45.995	34.704	34.707	4.82	126.73	2.33	33.70	0.00	0.006	0.000	5284	22222222	

CRUISE: CD 29 STA: 95 DATE (D/M/Y): 13-12-87 TIME: 0846 LAT: 34 9.78 S LONG: 107 59.77 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81897E-04 1/S SOUND SPEED= 1505.8 M/S Depth= 4984 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.102	35.754	5.78	17.102	26.070	34.603	42.767	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.102	35.754	5.78	17.102	26.070	34.603	42.767	0.002	0.0	-0.33	0.000	0.00	0.000	1.0
20	16.419	35.764	5.81	16.416	26.240	34.796	42.982	0.037	0.0	-7.29	0.051	-140.07	2.345	19.9
30	16.260	35.767	5.80	16.255	26.280	34.841	43.032	0.055	0.1	-9.87	-0.043	-181.80	2.672	29.8
40	16.177	35.763	5.81	16.170	26.296	34.861	43.054	0.072	0.1	-11.47	-0.761	-166.62	2.558	39.8
50	16.033	35.754	5.75	16.025	26.323	34.693	43.091	0.090	0.2	-9.46	-0.212	-162.42	2.525	49.7
100	14.845	35.597	5.61	14.830	26.470	35.084	43.324	0.172	0.9	-24.10	-3.511	-213.62	2.896	99.4
125	14.531	35.552	5.60	14.513	26.505	35.131	43.382	0.212	1.3	-4.77	-0.604	-48.39	1.379	124.2
150	14.417	35.533	5.62	14.394	26.515	35.146	43.401	0.251	1.8	-3.88	-0.762	-21.99	0.929	149.1
200	13.911	35.431	5.62	13.882	26.546	35.197	43.471	0.328	3.2	-17.76	-3.411	-92.68	1.908	198.7
250	12.829	35.225	5.65	12.794	26.609	35.304	43.620	0.404	5.0	-21.40	-3.911	-107.71	2.057	248.3
300	11.864	35.058	5.63	11.825	26.668	35.403	43.756	0.477	7.0	-17.21	-2.811	-95.03	1.932	298.0
350	11.015	34.917	5.63	10.972	26.717	35.488	43.875	0.548	9.4	-14.98	-2.438	-73.01	1.693	347.6
400	10.550	34.842	5.68	10.502	26.742	35.533	43.940	0.618	12.0	-6.25	-1.029	-27.76	1.044	397.2
450	10.171	34.780	5.67	10.117	26.761	35.569	43.992	0.687	15.0	-7.27	-1.079	-38.08	1.223	446.8
500	9.804	34.730	5.58	9.746	26.785	35.610	44.048	0.756	18.4	-7.35	-0.866	-50.95	1.415	496.3
600	9.180	34.659	5.43	9.113	26.833	35.687	44.151	0.890	25.9	-6.16	-0.728	-40.34	1.259	595.4
700	8.545	34.586	5.35	8.469	26.878	35.761	44.253	1.022	34.7	-8.46	-0.760	-65.87	1.608	694.5
800	7.347	34.501	4.83	7.268	26.989	35.927	44.472	1.148	44.3	-15.36	-0.943	-135.94	2.310	793.5
900	5.842	34.419	4.57	5.762	27.124	36.135	44.748	1.260	54.0	-13.77	-0.588	-123.70	2.204	892.5
1000	4.724	34.392	4.43	4.643	27.234	36.301	44.966	1.359	63.6	-8.81	-0.143	-86.72	1.845	991.3
1200	3.608	34.454	4.00	3.519	27.400	36.525	45.243	1.530	82.7	-3.11	0.523	-65.37	1.602	1188.9
1400	3.122	34.523	3.77	3.021	27.502	36.652	45.394	1.674	101.8	-2.02	0.365	-43.80	1.311	1386.3
1600	2.021	34.604	3.69	2.707	27.595	36.760	45.516	1.801	121.2	-1.28	0.358	-36.00	1.189	1583.5
1800	2.629	34.660	3.71	2.500	27.658	36.833	45.599	1.914	140.8	-1.06	0.232	-25.90	1.009	1790.5
2000	2.428	34.699	3.78	2.285	27.708	36.894	45.670	2.018	160.8	-1.06	0.139	-20.25	0.892	1977.3
2200	2.258	34.717	3.86	2.100	27.737	36.933	45.719	2.115	181.6	-0.95	0.064	-14.56	0.756	2173.9
2400	2.085	34.726	3.93	1.912	27.759	36.966	45.751	2.207	203.2	-0.89	0.029	-11.93	0.685	2370.3
2600	1.936	34.730	4.03	1.748	27.775	36.990	45.794	2.296	225.9	-0.80	0.006	-9.76	0.619	2566.6
2800	1.801	34.732	4.10	1.596	27.788	37.012	45.823	2.383	249.7	-0.73	0.009	-9.24	0.603	2762.6
3000	1.684	34.732	4.25	1.463	27.798	37.029	45.847	2.467	274.6	-0.64	0.002	-7.99	0.560	2958.5
3200	1.571	34.732	4.36	1.333	27.807	37.046	45.871	2.549	300.6	-0.72	-0.019	-7.87	0.556	3154.2
3400	1.450	34.731	4.46	1.195	27.816	37.062	45.895	2.630	327.7	-0.74	-0.011	-8.76	0.586	3349.7
3600	1.355	34.728	4.53	1.082	27.822	37.074	45.913	2.708	355.7	-0.56	-0.010	-6.76	0.515	3545.0
3800	1.264	34.723	4.62	0.973	27.825	37.084	45.928	2.785	384.8	-0.56	-0.018	-6.37	0.500	3740.2
4000	1.192	34.719	4.65	0.882	27.828	37.092	45.941	2.861	415.1	-0.42	-0.013	-4.92	0.439	3935.2
4200	1.125	34.717	4.73	0.795	27.832	37.101	45.955	2.936	446.5	-0.37	-0.014	-4.36	0.414	4130.0
4400	1.050	34.714	4.79	0.700	27.835	37.110	45.969	3.011	479.1	-0.54	-0.024	-6.30	0.497	4324.7
4600	0.992	34.710	4.87	0.621	27.837	37.116	45.980	3.084	512.7	-0.32	-0.015	-3.81	0.387	4519.2
4800	0.957	34.707	4.94	0.565	27.838	37.121	45.987	3.157	547.6	-0.20	-0.008	-2.54	0.316	4713.5
5000	0.942	34.706	4.95	0.527	27.839	37.124	45.993	3.229	584.0	-0.22	-0.012	-2.54	0.000	4907.6
5065	0.936	34.705	4.94	0.513	27.839	37.125	45.994	3.253	596.2	-0.25	-0.012	-2.54	0.000	4970.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	3.5	17.021	17.020	26.092	34.627	42.794	35.757	35.772	5.66	1.56		0.00	0.00			3	222252255
23	92.4	15.107	15.093	26.433	35.038	43.268	35.624	35.655	5.64	1.40		0.60	0.00			91	222252255
22	191.6	13.970	13.942	26.553	35.202	43.473	35.457	35.460	5.74	1.57		3.30	0.00			190	222252255
21	290.7	12.069	12.031	26.648	35.375	43.720	35.083	35.099	5.68	2.08		8.00	0.00			288	222252255
20	390.9	10.610	10.587	26.734	35.524	43.928	34.846		5.74	3.27		12.00	0.00			387	222252255
19	490.6	9.814	9.757	26.789	35.614	44.051	34.738	34.731	5.63	3.94		15.20	0.00			486	222252255
18	583.1	9.313	9.247	26.823	35.670	44.129	34.673	34.679	5.44	4.96		17.40	0.00			577	222252255
17	690.8	8.630	8.555	26.869	35.748	44.236	34.592	34.602	5.38	6.48		19.90	0.00			684	222252255
16	790.6	7.591	7.511	26.960	35.888	44.421	34.509	34.520	4.78	13.24		25.20	0.00			783	222252255
15	893.6	5.878	5.798	27.125	36.134	44.745	34.426	34.429	4.55	24.91		29.80	0.00			884	222252255
14	988.5	4.834	4.823	27.219	36.281	44.941	34.389		.2	34.88		32.30	0.00			978	222252255
13	1191.3	3.632	3.544	27.393	36.516	45.233	34.448	34.445	4	58.87		35.10	0.00			1178	222252255
12	1492.3	2.967	2.861	27.551	36.709	45.458	34.566	34.570		77.96		36.00	0.00			1475	222252255
11	1791.0	2.623	2.495	27.657	36.833	45.597	34.658	34.659		90.97		35.30	0.00			1769	222252255
10	2095.2	2.339	2.189	27.723	36.915	45.696	34.709	34.711		101.44		34.80	0.00			2068	222252255
9	2395.8	2.009	1.916	27.759	36.965	45.760	34.726	34.730		107.86		34.40	0.00			2363	222252255
8	2694.0	1.884	1.687	27.780	36.998	45.805	34.730	34.730	4.10	110.06		34.40	0.00			2656	222252255
7	2997.6	1.701	1.480	27.796	37.026	45.844	34.731	34.735		114.96		33.90	0.00			2953	222252255
6	3300.5	1.520	1.273	27.810	37.052	45.880	34.730	34.730	4.44	117.50		33.90	0.00			3249	222252255
5	3701.3	1.308	1.026	27.823	37.079	45.920	34.725	34.722	4.60	121.55		33.80	0.00			3641	222252255
3	4503.5	1.020	0.659	27.836	37.113	45.975	34.712	34.714	4.81	124.75		33.60	0.00			4422	222252255
2	4906.1	0.950	0.545	27.838	37.122	45.990	34.706	34.707		126.11		33.50	0.00			4813	222252255

CRUISE: CD 23 STA: 96 DATE (D/M/Y) 13-12-87 TIME: 1514 LAT: 34 9 85 S LONG: 125 34 36 E

GRAVITY= 9.7966 M/S CORIOLIS= - 81900E-04 1/5 SOUND SPEED= 1508.9 M/S Depth= 5452 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	Θ-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	16.987	35.637	5.39	16.987	26.053	34.591	42.759	0.000	0.0	-0.16	0.000	0.00	0.000	0.0
1	16.987	35.637	5.39	16.987	26.053	34.591	42.760	0.002	0.0	-0.33	0.000	0.00	0.000	1.0
20	16.961	35.739	5.57	16.958	26.093	34.631	42.800	0.039	0.0	-11.16	2.591	-373.28	3.629	10.0
30	16.804	35.757	5.69	16.599	26.191	34.741	42.921	0.057	0.1	-71.05	1.300	-1422.33	7.473	20.0
40	16.201	35.766	5.67	16.195	26.293	34.857	43.049	0.075	0.2	-12.98	-0.703	-198.67	2.793	30.0
50	16.022	35.749	5.70	16.014	26.321	34.892	43.090	0.092	0.2	-28.82	-4.340	-265.45	3.229	40.0
100	14.557	35.558	5.63	14.543	26.503	35.128	43.378	0.173	0.8	-7.31	-0.118	-120.54	2.176	50.0
125	14.396	35.544	5.65	14.378	26.528	35.159	43.415	0.211	1.3	-6.02	-0.818	-67.77	1.631	100.0
150	14.001	35.460	5.61	13.979	26.548	35.193	43.465	0.250	1.8	-15.63	-3.015	-82.17	1.796	140.0
200	13.211	35.310	5.59	13.183	26.597	35.275	43.576	0.325	3.0	-20.41	-3.603	-95.98	1.941	180.0
250	12.287	35.142	5.63	12.254	26.651	35.368	43.704	0.398	4.8	-17.30	-2.982	-94.89	1.930	240.0
300	11.427	34.997	5.63	11.389	26.702	35.455	43.826	0.470	6.8	-19.23	-3.271	-89.90	1.879	290.0
350	10.518	34.853	5.56	10.506	26.750	35.541	43.948	0.539	9.1	-11.40	-1.791	-55.79	1.480	340.0
400	10.103	34.781	5.61	10.055	26.772	35.583	44.008	0.607	11.7	-7.61	-1.264	-30.72	1.098	390.0
450	9.736	34.727	5.58	9.684	26.792	35.620	44.061	0.675	14.7	-6.57	-0.766	-45.39	1.335	440.0
500	9.465	34.698	5.52	9.408	26.816	35.656	44.108	0.742	17.9	-5.86	-0.633	-42.66	1.094	490.0
600	8.937	34.633	5.42	8.871	26.852	35.716	44.191	0.873	25.3	-4.88	-0.591	-30.04	1.056	590.0
700	8.416	34.577	5.29	8.341	26.891	35.779	44.277	1.004	34.0	-8.62	-0.709	-69.97	1.658	690.0
800	7.260	34.498	4.73	7.181	26.999	35.941	44.489	1.123	43.4	-12.25	-0.728	-109.02	2.069	790.0
900	5.828	34.418	4.60	5.748	27.125	36.137	44.750	1.240	53.1	-13.24	-0.604	-117.29	2.146	890.0
1000	4.682	34.392	4.42	4.602	27.238	36.308	44.975	1.339	62.8	-9.43	0.026	-104.80	2.029	990.0
1200	3.637	34.454	3.99	3.548	27.398	36.521	45.237	1.509	81.8	-3.65	0.380	-61.94	1.560	1180.0
1400	3.138	34.521	3.82	3.038	27.499	36.648	45.389	1.654	100.9	-1.76	0.397	-43.22	1.383	1380.0
1600	2.858	34.600	3.73	2.743	27.589	36.752	45.506	1.781	120.4	-1.71	0.286	-35.98	1.189	1580.0
1800	2.624	34.660	3.77	2.495	27.659	36.834	45.600	1.895	140.1	-1.08	0.258	-27.77	1.044	1780.0
2000	2.427	34.698	3.85	2.284	27.707	36.893	45.670	1.998	160.2	-1.04	0.137	-20.02	0.887	1977.0
2200	2.258	34.716	3.88	2.100	27.737	36.933	45.718	2.095	180.9	-0.86	0.061	-13.39	0.725	2173.0
2400	2.103	34.725	3.94	1.930	27.757	36.962	45.756	2.188	202.6	-0.76	0.023	-10.18	0.632	2370.0
2600	1.981	34.729	4.02	1.791	27.771	36.984	45.785	2.278	225.6	-0.73	0.017	-9.54	0.612	2566.0
2800	1.844	34.732	4.16	1.638	27.785	37.006	45.815	2.366	249.7	-0.67	-0.002	-7.92	0.559	2762.0
3000	1.733	34.730	4.23	1.511	27.793	37.021	45.837	2.451	275.0	-0.66	-0.001	-7.99	0.560	2958.0
3200	1.627	34.729	4.29	1.388	27.801	37.037	45.859	2.535	301.6	-0.67	-0.004	-8.13	0.565	3154.0
3400	1.503	34.728	4.38	1.247	27.810	37.054	45.883	2.617	329.3	-0.70	-0.014	-8.20	0.557	3350.0
3600	1.399	34.726	4.44	1.125	27.817	37.067	45.903	2.698	357.9	-0.57	-0.012	-6.63	0.512	3545.0
3800	1.308	34.722	4.49	1.015	27.821	37.078	45.920	2.776	387.6	-0.51	-0.015	-5.95	0.483	3740.0
4000	1.242	34.721	4.53	0.930	27.826	37.087	45.934	2.854	418.5	-0.43	-0.009	-5.38	0.460	3935.0
4200	1.176	34.718	4.64	0.844	27.829	37.095	45.947	2.931	450.6	-0.45	-0.014	-5.43	0.462	4130.0
4400	1.108	34.715	4.69	0.756	27.832	37.104	45.960	3.007	483.8	-0.47	-0.017	-5.65	0.471	4324.0
4600	1.033	34.711	4.74	0.661	27.835	37.112	45.974	3.081	518.1	-0.46	-0.020	-5.53	0.466	4519.0
4800	0.982	34.708	4.80	0.588	27.837	37.118	45.984	3.155	553.4	-0.31	-0.012	-3.87	0.390	4713.0
5000	0.959	34.706	4.85	0.543	27.838	37.122	45.990	3.228	590.1	-0.17	-0.007	-2.14	0.290	4907.0
5200	0.962	34.705	4.85	0.522	27.838	37.124	45.993	3.302	628.6	-0.08	-0.005	-0.88	0.186	5101.0
5400	0.974	34.704	4.87	0.508	27.839	37.125	45.995	3.377	669.0	-0.05	-0.004	-0.62	0.155	5295.0
5545	0.984	34.704	4.88	0.501	27.839	37.125	45.995	3.432	699.7	-0.06	-0.003	-0.62	0.000	5435.0

BOTL	PRES	CTD	TMP	THETA	SIG-TH	SIG-2	SIG-4	CTOSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALTY
NO.	DBAR	IPTS68	IPTS68		KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	15.8	16.878	16.876	26.105	34.646	42.818	35.730	35.739	5.67	0.93	0.22	0.10	0.00				15	200020255
23	102.8	14.461	14.446	26.521	35.149	43.403	35.554	35.542	5.63	0.92	0.34	2.10	0.00		2.426	1.253	101	200020202
22	200.7	13.003	12.975	26.534	35.321	43.629	35.304	35.266	5.54	1.26	0.55	5.70	0.00		2.405	1.266	199	200020202
21	298.3	11.469	11.432	26.695	35.447	43.816	34.998	35.002	5.62	1.92	0.79	9.60	0.00				295	200020255
20	400.7	10.213	10.166	26.751	35.557	43.978	34.778	34.794	5.67	2.91	1.02	13.20	0.00		2.444	1.289	397	200020202
19	500.0	9.558	9.501	26.801	35.637	44.085	34.699	34.704	5.50	3.92	1.19	16.10	0.00		2.182	1.144	495	200020202
18	601.2	8.967	8.901	26.846	35.709	44.183	34.632	34.632	5.47	5.08	1.33	18.30	0.00		1.842	0.958	595	200020202
17	698.9	8.430	8.355	26.898	35.776	44.273	34.577	34.572	5.25	7.43	1.48	20.60	0.00		1.517	0.815	692	200020202
16	801.1	7.335	7.256	26.986	35.926	44.470	34.496	34.506	4.72	14.97	1.78	25.40	0.00		0.705	0.393	793	200020202
15	898.8	5.944	5.864	27.111	36.118	44.725	34.419	34.418	4.57	23.69	2.04	29.30	0.00		0.417	0.256	889	200020202
14	999.5	4.716	4.635	27.235	36.303	44.968	34.392	34.394	4.43	36.44	2.26	31.80	0.00		0.209	0.127	989	200020202
13	1399.2	3.145	3.044	27.499	36.647	45.388	34.521	34.522	3.79	71.17	2.55	35.50	0.00		0.034		1383	200020205
12	1800.7	2.628	2.499	27.658	36.834	45.599	34.669	34.654	3.74	89.27	2.52	34.90	0.00				1779	200020255
11	2199.8	2.260	2.102	27.736	36.932	45.717	34.716	34.716	3.89	104.18	2.51	34.30	0.00				2171	200020255
10	2497.8	2.029	1.848	27.764	36.974	45.772	34.726	34.725	3.96	110.53	2.48	34.10	0.00				2464	200020255
9	2799.1	1.843	1.637	27.785	37.007	45.816	34.732	34.735	4.19	110.34	2.42	33.30	0.00				2759	200020255
8	3103.7	1.667	1.436	27.798	37.031	45.851	34.730	34.727	4.28	115.35	2.44	33.40	0.00				3057	200020255
7	3504.5	1.430	1.413	27.815	37.063	45.897	34.727		4.41	118.67	2.42	33.10	0.00				3449	200020255
6	3905.2	1.260	1.232	27.824	37.084	45.929	34.721		4.57	121.83	2.44	33.10	0.00				3834	200020255
5	4207.1	1.167	0.835	27.830	37.097	45.948	34.718	34.718	4.68	121.89	2.26	32.90	0.00				4133	200020255
4	4509.2	1.067	0.704	27.834	37.108	45.968	34.713	34.715	4.74	123.28	2.26	32.90	0.00				4427	200020255
3	4906.7	0.963	0.558	27.838	37.121	45.988	34.707	34.705	4.82	125.76	2.27	32.90	0.00				4813	200020255
2	5313.9	0.968	0.514	27.839	37.125	45.994	34.705	34.701	4.83	126.07	2.26	32.90	0.00				5004	200020255
1	5550.0	0.984	0.869	27.838	37.125	45.995	34.703		4.83	126.04	2.29	32.90	0.00				5437	200020255

CRUISE: CD 29 STA: 97 DATE (D/M/Y): 13-12-87 TIME 2226 LAT 34 10 00 S LONG. 109 9 05 E

GRAVITY= 9.7966 M/S CORIOLIS= - .81905E-04 1/S SOUND SPEED= 1506.4 M/S Depth= 5014 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-MT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	17.215	35.755	5.25	17.215	26.043	34.573	42.733	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.215	35.755	5.25	17.215	26.043	34.573	42.733	0.002	0.0	-0.33	0.000	0.00	0.000	1.0
20	16.596	35.720	5.64	16.593	26.165	34.715	42.896	0.039	0.0	-63.61	-3.798	-970.87	6.174	19.9
30	16.253	35.680	5.78	16.248	26.214	34.777	42.970	0.057	0.1	-10.97	-0.434	-178.21	2.645	29.8
40	16.191	35.687	5.79	16.184	26.235	34.800	42.994	0.075	0.1	-7.01	0.384	-154.33	2.462	39.8
50	16.038	35.694	5.81	16.030	26.275	34.846	43.045	0.093	0.2	-35.11	0.273	-666.44	5.115	49.7
100	14.973	35.607	5.56	14.958	26.450	35.060	43.295	0.176	0.9	-21.23	-2.946	-197.89	2.787	99.4
125	14.598	35.536	5.50	14.580	26.478	35.102	43.351	0.216	1.3	-14.91	-2.468	-110.74	2.085	124.2
150	14.280	35.478	5.45	14.258	26.503	35.139	43.400	0.256	1.9	-14.39	-2.632	-88.24	1.861	149.1
200	13.690	35.372	5.65	13.662	26.546	35.206	43.489	0.333	3.3	-14.23	-2.664	-75.77	1.725	198.7
250	12.904	35.231	5.50	12.870	26.599	35.290	43.603	0.409	5.0	-15.66	2.727	-87.81	1.857	248.4
300	11.955	35.067	5.56	11.916	26.658	35.389	43.739	0.483	7.1	-24.43	-4.069	-130.31	2.262	298.0
350	10.919	34.900	5.52	10.876	26.720	35.496	43.887	0.554	9.4	-17.36	-2.826	-83.77	1.814	347.6
400	10.174	34.779	5.65	10.127	26.758	35.566	43.988	0.624	12.1	-11.90	-1.796	-60.45	1.541	397.2
450	9.811	34.726	5.70	9.759	26.779	35.604	44.041	0.692	15.0	-6.16	-0.780	-38.92	1.236	446.8
500	9.551	34.704	5.49	9.494	26.806	35.642	44.091	0.759	18.3	-3.60	-0.135	-42.34	1.289	496.3
600	9.899	34.659	5.47	9.833	26.846	35.703	44.171	0.892	25.8	-5.13	-0.551	-36.46	1.197	535.5
700	8.557	34.592	5.37	8.481	26.881	35.763	44.254	1.023	34.4	-8.53	-0.908	-57.01	1.496	694.5
800	7.457	34.502	4.83	7.377	26.974	35.908	44.447	1.149	44.0	-12.35	-0.697	-113.26	2.109	793.5
900	5.901	34.419	4.56	5.821	27.116	36.125	44.735	1.262	53.9	-16.20	-0.786	-141.28	2.355	892.5
1000	4.698	34.377	4.52	4.618	27.225	36.294	44.960	1.362	63.6	-10.30	-0.103	-105.17	2.032	991.3
1200	3.573	34.451	3.97	3.484	27.401	36.528	45.247	1.532	82.5	-2.82	0.480	-59.63	1.530	1188.9
1400	3.158	34.530	3.76	3.057	27.504	36.652	45.701	1.676	101.6	-2.03	0.346	-42.68	1.294	1386.3
1600	2.831	34.601	3.72	2.717	27.592	36.757	45.512	1.804	121.1	-1.27	0.373	-36.80	1.202	1583.5
1800	2.627	34.661	3.71	2.499	27.659	36.834	45.600	1.916	140.6	-0.96	0.197	-22.67	0.944	1780.5
2000	2.441	34.697	3.78	2.298	27.705	36.891	45.666	2.020	160.8	-1.07	0.140	-20.48	0.897	1977.3
2200	2.271	34.716	3.85	2.113	27.735	36.931	45.715	2.118	181.6	-0.95	0.066	-14.64	0.758	2173.9
2400	2.104	34.725	3.91	1.930	27.757	36.962	45.756	2.210	203.3	-0.85	0.026	-11.33	0.667	2370.3
2600	1.955	34.729	4.00	1.766	27.773	36.987	45.790	2.300	226.2	-0.77	0.011	-9.61	0.614	2566.6
2800	1.845	34.730	4.08	1.639	27.783	37.005	45.814	2.387	250.2	-0.58	0.001	-7.03	0.525	2762.6
3000	1.747	34.730	4.15	1.524	27.792	37.020	45.835	2.473	275.6	-0.62	-0.002	-7.55	0.544	2958.5
3200	1.631	34.729	4.22	1.391	27.801	37.036	45.858	2.558	302.3	-0.71	-0.007	-8.50	0.578	3154.2
3400	1.513	34.728	4.33	1.256	27.809	37.052	45.882	2.640	330.0	-0.73	-0.015	-8.38	0.574	3349.7
3600	1.396	34.725	4.38	1.122	27.816	37.066	45.903	2.720	358.7	-0.59	-0.009	-7.18	0.531	3545.1
3800	1.304	34.722	4.48	1.012	27.821	37.078	45.920	2.799	388.4	-0.53	-0.025	-5.63	0.470	3740.2
4000	1.243	34.718	4.46	0.931	27.824	37.085	45.932	2.877	419.4	-0.33	-0.003	-4.33	0.412	3935.2
4200	1.195	34.717	4.57	0.863	27.827	37.093	45.943	2.954	451.7	-0.43	-0.007	-5.60	0.469	4130.1
4400	1.125	34.716	4.67	0.773	27.832	37.102	45.958	3.031	485.2	-0.52	-0.019	-6.27	0.496	4324.7
4600	1.044	34.711	4.73	0.672	27.834	37.111	45.972	3.106	519.7	-0.49	-0.020	-6.03	0.486	4519.2
4800	0.983	34.708	4.76	0.590	27.837	37.118	45.983	3.180	555.1	-0.36	-0.015	-4.53	0.422	4713.5
5000	0.959	34.706	4.79	0.543	27.838	37.122	45.990	3.253	591.8	-0.19	-0.009	-2.35	0.304	4907.6
5145	0.945	34.704	4.83	0.512	27.838	37.124	45.994	3.306	619.4	-0.29	-0.012	-2.35	0.000	5048.3

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTOSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUAL11
24	3.0	17.266	17.266	26.030	34.558	42.717	35.754	35.756	5.54	1.25	0.18	0.00	0.00	2.284	1.232	2	22222222
23	102.3	14.918	14.903	26.459	35.070	43.308	35.603	35.595	5.56	1.26	0.25	1.00	0.00	2.401	1.395	101	22222222
22	188.1	13.009	13.782	26.535	35.190	43.468	35.390	35.394	5.59	1.10	0.39	3.00	0.00	2.458	1.383	186	22222222
21	289.8	12.105	12.067	26.656	35.381	43.724	35.102	35.092	5.63	1.77	0.62	7.20	0.00	2.839	1.524	287	22222222
20	402.1	10.132	10.084	26.758	35.569	43.992	34.770	34.770	5.70	3.11	0.98	13.00	0.00	2.642	1.432	398	22222222
19	502.1	9.536	9.479	26.808	35.645	44.094	34.703	34.697	5.48	4.29	1.16	16.20	0.00	2.189	1.164	497	22222222
18	602.5	8.985	8.918	26.866	35.728	44.200	34.661	34.638	5.45	5.12	1.30	18.20	0.00	2.090	1.133	597	22222222
17	701.8	8.377	8.302	26.908	35.799	44.297	34.592	34.563	5.29	7.30	1.46	20.60	0.00	1.722	0.954	695	22222222
16	801.7	7.265	7.186	26.999	35.942	44.490	34.500	34.488	4.69	14.98	1.76	25.40	0.00	0.840	0.465	794	22222222
15	900.6	6.845	5.827	27.122	36.134	44.746	34.418		4.54	24.32	2.02	29.20	0.00	0.439	0.256	891	25222222
14	1000.9	5.587	4.507	27.237	36.311	44.983	34.377	34.370	4.52	34.32	2.20	31.50	0.00	0.308	0.196	990	22222222
13	1209.5	5.378	3.378	27.453	36.589	45.318	34.492		3.77	67.63	2.51	35.40	0.00	0.038	0.000	1285	25222222
12	1600.6	2.829	2.714	27.592	36.757	45.513	34.601	34.597	3.68	81.70	2.53	35.50	0.00			1582	22222255
11	1900.1	2.534	2.398	27.683	36.863	45.634	34.680	34.677	3.73	94.26	2.47	34.80	0.00	0.004	0.000	1877	22222222
10	2196.8	2.261	2.104	27.736	36.932	45.717	34.716	34.717	3.86	103.40	2.45	34.20	0.00			2168	22222255
9	2501.5	2.024	1.843	27.766	36.976	45.775	34.728	34.727	3.97	109.37	2.41	33.90	0.00			2467	22222255
8	2803.5	1.843	1.637	27.783	37.005	45.814	34.730	34.730	4.10	112.18	2.38	33.70	0.00			2763	22222255
7	3103.3	1.683	1.451	27.797	37.029	45.848	34.730	34.732	4.21	115.15	2.37	33.50	0.00			3057	22222255
6	3405.7	1.504	1.247	27.810	37.053	45.883	34.728	34.728	4.38	116.96	2.36	33.30	0.00			3352	22222255
5	3805.5	1.311	1.018	27.820	37.077	45.919	34.721	34.725	4.51	120.09	2.34	33.30	0.00			3742	22222255
4	4107.9	1.219	0.896	27.826	37.089	45.938	34.718	34.716	4.58	122.56	2.34	33.30	0.00			4037	22222255
3	4473.8	1.096	0.737	27.833	37.105	45.963	34.714	34.712	4.72	122.04	2.33	33.00	0.00			4393	22222255
2	4911.8	0.961	0.556	27.837	37.121	45.988	34.706	34.705	4.81	125.17	2.33	33.30	0.00			4818	22222255
1	5152.7	0.946	0.512	27.839	37.125	45.994	34.705	34.702	4.81	125.65	2.33	33.30	0.00	0.009	0.000	5052	22222222

CRUISE: CD 29 STA: 98 DATE (D/M/Y): 14-12-87 TIME: 0514 LAT: 34 9 89 S LONG: 109 42 30 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81901E-04 1/S SOUND SPEED= 1495.7 M/S Depth= 3260 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m %)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.379	35.737	5.95	17.379	25.990	34.514	42.670	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
3	17.379	35.737	5.95	17.378	25.990	34.514	42.670	0.006	0.0	-0.34	0.000	0.00	0.000	3.0
20	17.160	35.731	5.58	17.157	26.039	34.570	42.733	0.040	0.0	-63.41	-3.095	-1033.06	6.369	19.9
30	16.468	35.711	5.73	16.463	26.188	34.743	42.928	0.059	0.1	-25.58	0.587	-518.12	4.511	29.8
40	16.351	35.719	5.82	16.345	26.222	34.781	42.970	0.077	0.2	-5.13	0.767	-143.41	2.373	39.8
50	16.291	35.725	5.77	16.283	26.241	34.802	42.993	0.095	0.2	-17.80	-1.532	-238.43	3.060	49.7
100	14.786	35.564	5.69	14.771	26.458	35.075	43.317	0.179	0.9	-21.09	-3.571	-152.72	2.449	99.4
125	14.313	35.477	5.64	14.295	26.494	35.129	43.388	0.218	1.3	-23.53	-4.721	-118.77	2.160	124.2
150	13.947	35.415	5.68	13.926	26.524	35.174	43.447	0.257	1.9	5.75	2.997	-88.03	1.859	149.1
200	13.190	35.282	5.66	13.162	26.580	35.260	43.561	0.333	3.2	-19.06	-3.530	-96.50	1.947	198.7
250	12.311	35.131	5.69	12.278	26.638	35.354	43.690	0.408	4.9	-11.40	-1.419	-94.23	1.924	248.4
300	11.396	34.975	5.53	11.358	26.691	35.446	43.818	0.480	7.0	-18.67	-3.132	-91.80	1.899	298.0
350	10.531	34.837	5.51	10.489	26.741	35.533	43.940	0.550	9.3	-16.80	-2.615	-83.51	1.811	347.6
400	9.944	34.748	5.63	9.897	26.773	35.592	44.023	0.618	11.9	-6.27	-0.645	-49.37	1.392	397.2
450	9.662	34.720	5.51	9.611	26.799	35.631	44.074	0.685	14.8	-4.06	-0.247	-41.90	1.283	446.8
500	9.447	34.696	5.53	9.390	26.817	35.658	44.111	0.752	18.0	-5.69	-0.769	-31.63	1.114	496.3
600	8.984	34.643	5.48	8.917	26.852	35.714	44.187	0.884	25.4	-6.45	-0.854	-35.07	1.173	595.4
700	8.308	34.561	5.26	8.233	26.894	35.788	44.290	1.014	34.0	-8.30	-0.700	-66.05	1.610	694.5
800	7.197	34.488	4.71	7.118	27.000	35.946	44.496	1.138	43.5	-13.82	-0.766	-125.59	2.221	793.5
900	5.730	34.413	4.54	5.651	27.132	36.149	44.767	1.249	53.1	-13.51	-0.597	-118.20	2.154	892.4
1000	4.441	34.376	4.48	4.362	27.252	36.334	45.012	1.346	62.6	-8.75	0.086	-99.13	1.973	991.3
1200	3.533	34.449	4.02	3.445	27.404	36.532	45.254	1.513	81.2	-2.78	0.457	-57.46	1.502	1188.9
1400	3.101	34.531	3.74	3.000	27.511	36.662	45.404	1.656	100.1	-1.79	0.346	-40.27	1.258	1386.3
1600	2.817	34.604	3.69	2.702	27.596	36.761	45.518	1.782	119.4	-1.31	0.366	-36.76	1.201	1583.5
1800	2.609	34.663	3.74	2.480	27.662	36.839	45.605	1.894	138.9	-1.00	0.226	-24.99	0.991	1780.5
2000	2.428	34.698	3.80	2.285	27.707	36.893	45.670	1.997	158.9	-1.00	0.146	-20.98	0.908	1977.3
2200	2.229	34.719	3.87	2.072	27.741	36.939	45.725	2.094	179.5	-1.00	0.061	-15.00	0.768	2173.9
2400	2.066	34.726	3.96	1.893	27.761	36.968	45.764	2.185	200.9	-0.76	0.024	-10.12	0.630	2370.3
2600	1.934	34.730	4.05	1.745	27.775	36.991	45.794	2.274	223.6	-0.79	0.010	-9.87	0.623	2566.5
2800	1.733	34.732	4.20	1.530	27.793	37.020	45.835	2.360	247.2	-1.50	-0.002	-17.69	0.833	2762.6
3000	1.518	34.729	4.31	1.301	27.807	37.047	45.874	2.441	271.1	-0.85	-0.010	-9.20	0.601	2958.5
3200	1.391	34.724	4.33	1.158	27.813	37.062	45.896	2.519	295.8	-0.60	-0.019	-6.27	0.496	3154.2
3303	1.358	34.723	4.34	1.115	27.815	37.066	45.903	2.559	309.0	-0.44	-0.010	-6.27	0.000	3254.9

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	15.3	17.151	17.149	26.045	34.576	42.739	35.736	35.732	5.60	1.34	0.18	0.10	0.00			15	222222255
23	102.2	14.760	14.745	26.449	35.067	43.310	35.545	35.551	5.62	1.17	0.27	0.10	0.00			101	222222255
22	201.1	13.041	13.014	26.611	35.296	43.603	35.284	35.246	5.59	1.34	0.48	4.10	0.00			199	222222255
21	302.3	11.371	11.333	26.689	35.445	43.818	34.966	34.968	5.62	2.00	0.76	8.90	0.00			299	222222255
20	399.7	9.944	9.898	26.773	35.592	44.023	34.748	34.745	5.66	3.34	1.03	13.50	0.00			396	222222255
19	501.6	9.430	9.373	26.818	35.660	44.113	34.694	34.687	5.50	4.33	1.16	16.20	0.00			497	222222255
18	598.6	8.961	8.895	26.857	35.721	44.194	34.645	34.643	5.44	5.17	1.29	18.00	0.00			593	222222255
17	699.4	8.322	8.248	26.893	35.786	44.288	34.562	34.561	5.28	7.51	1.45	20.70	0.00			692	222222255
16	798.6	7.231	7.152	26.995	35.940	44.489	34.489	34.488	4.69	15.01	1.76	25.50	0.00			790	222222255
15	901.1	5.775	5.695	27.126	36.141	44.757	34.412	34.410	4.55	25.03	2.04	29.40	0.00			892	222222255
14	1000.2	4.453	4.374	27.250	36.332	45.010	34.376	34.371	4.51	36.54	2.21	32.00	0.00			990	222222255
13	1151.0	3.658	3.573	27.374	36.496	45.212	34.428	34.426	4.10	54.58	2.43	34.50	0.00			1139	222222255
12	1300.7	3.296	3.202	27.463	36.604	45.337	34.495	34.498	3.75	68.44	2.52	35.60	0.00			1286	222222255
11	1500.2	2.948	2.841	27.553	36.712	45.462	34.566	34.563	3.69	76.97	2.53	35.50	0.00			1483	222222255
10	1700.3	2.706	2.585	27.634	36.805	45.567	34.639	34.633	3.69	85.83	2.47	35.20	0.00			1680	222222255
9	1898.5	2.523	2.388	27.686	36.867	45.638	34.683	34.682	3.75	93.02	2.44	34.70	0.00			1875	222222255
8	2098.5	2.333	2.183	27.725	36.917	45.698	34.711	34.709	3.82	100.56	2.43	34.50	0.00			2072	222222255
7	2299.6	2.154	1.989	27.751	36.954	45.745	34.724	34.721	3.91	106.42	2.43	34.40	0.00			2269	222222255
6	2502.6	2.006	1.825	27.768	36.980	45.779	34.729	34.727	4.00	109.94	2.41	34.20	0.00			2468	222222255
5	2601.4	1.933	1.744	27.775	36.991	45.795	34.730	34.730	4.07	109.96	2.37	34.00	0.00			2565	222222255
4	2800.1	1.714	1.511	27.794	37.023	45.839	34.732	34.733	4.25	113.16	2.36	33.80	0.00			2760	222222255
3	3000.7	1.520	1.302	27.807	37.047	45.874	34.729	34.726	4.34	116.51	2.35	34.00	0.00			2956	222222255
2	2999.6	1.518	1.300	27.807	37.048	45.874	34.729	34.728	4.35	116.36	2.34	33.70	0.00			2955	222222255
1	3303.5	1.359	1.115	27.815	37.066	45.903	34.723	34.725	4.46	122.40	2.38	34.00	0.00			3252	222222255

CRUISE: CD 29 STA: 99 DATE (D/M/Y): 14-12-87 TIME: 0920 LAT: 34 9.92 S LONG: 110 0.08 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81902E-04 1/S SOUND SPEED= 1493.1 M/S Depth= 2572 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.403	35.721	5.51	17.403	25.972	34.495	42.651	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.403	35.721	5.51	17.403	25.972	34.495	42.651	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.144	35.712	5.63	17.141	26.028	34.561	42.724	0.040	0.0	-31.39	-0.747	-557.82	4.680	19.9
30	16.384	35.690	5.77	16.379	26.192	34.750	42.938	0.059	0.1	-51.32	-1.118	-895.88	5.931	29.8
40	16.182	35.689	5.82	16.175	26.238	34.803	42.998	0.077	0.2	-7.65	0.536	-175.71	2.627	39.8
50	16.108	35.692	5.76	16.100	26.258	34.826	43.023	0.095	0.2	-4.93	0.032	-93.70	1.918	49.7
100	14.928	35.575	5.70	14.913	26.436	35.047	43.284	0.180	0.9	-27.43	-3.648	-263.40	3.216	99.4
125	14.431	35.510	5.61	14.412	26.494	35.124	43.379	0.220	1.3	-19.21	-3.320	-130.56	2.264	124.2
150	13.917	35.412	5.54	13.896	26.529	35.179	43.453	0.259	1.9	-14.90	-2.478	-104.08	2.022	149.1
200	13.299	35.303	5.62	13.271	26.573	35.249	43.546	0.335	3.2	-22.15	-3.984	-119.51	2.166	198.7
250	12.436	35.168	5.61	12.402	26.643	35.353	43.684	0.409	4.9	-11.39	-1.569	-83.67	1.813	248.4
300	11.402	34.991	5.65	11.364	26.702	35.457	43.820	0.481	6.9	-20.63	-3.440	-101.90	2.000	298.0
350	10.510	34.842	5.64	10.468	26.748	35.541	43.949	0.550	9.2	-13.35	-2.211	-58.27	1.513	347.6
400	9.903	34.735	5.72	9.856	26.770	35.590	44.024	0.618	11.9	-9.82	-1.495	-46.89	1.357	397.2
450	9.592	34.700	5.55	9.541	26.795	35.630	44.076	0.686	14.8	-2.60	-0.014	-35.82	1.186	446.8
500	9.420	34.685	5.52	9.364	26.813	35.655	44.109	0.753	18.0	-6.33	-0.733	-42.93	1.298	496.3
600	8.822	34.626	5.47	8.826	26.854	35.720	44.197	0.885	25.4	-5.59	-0.694	-33.37	1.145	595.4
700	8.230	34.555	5.20	8.156	26.901	35.799	44.304	1.015	34.0	-10.21	-0.844	-82.77	1.803	694.5
800	7.139	34.485	4.68	7.060	27.005	35.953	44.507	1.138	43.4	-11.96	-0.633	-110.28	2.081	793.5
900	5.798	34.416	4.48	5.718	27.127	36.141	44.755	1.249	53.1	-13.10	-0.606	-114.76	2.123	892.4
1000	4.502	34.380	4.47	4.502	27.239	36.314	44.986	1.349	62.7	-9.89	-0.048	-104.48	2.025	991.3
1200	3.494	34.450	4.00	3.406	27.408	36.538	45.262	1.516	81.4	-2.69	0.504	-59.41	1.527	1188.9
1400	3.093	34.542	3.72	2.993	27.520	36.671	45.414	1.657	100.1	-1.75	0.342	-39.64	1.248	1386.3
1600	2.831	34.607	3.70	2.717	27.597	36.761	45.517	1.782	119.2	-1.36	0.346	-36.00	1.189	1583.5
1800	2.603	34.666	3.72	2.475	27.665	36.841	45.608	1.894	138.6	-1.02	0.232	-25.41	0.999	1780.5
2000	2.414	34.701	3.77	2.271	27.710	36.897	45.674	1.996	158.4	-1.08	0.126	-19.59	0.877	1977.3
2200	2.198	34.720	3.86	2.041	27.744	36.943	45.732	2.092	178.9	-1.08	0.062	-15.92	0.791	2173.9
2400	2.071	34.725	3.92	1.898	27.760	36.967	45.763	2.183	200.3	-0.66	0.022	-8.80	0.588	2370.3
2589	1.866	34.730	4.06	1.679	27.780	36.999	45.806	2.267	221.5	-1.41	0.023	-8.80	0.000	2555.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	2.0	17.294	17.294	25.238	33.778	41.948	34.730	35.725	5.55	1.22	0.19	0.10	0.00			1	222222255
23	102.3	14.606	14.591	26.484	35.107	43.356	35.547	35.528	5.51	1.22	0.33	1.80	0.00			101	222222255
22	201.4	12.918	12.891	26.649	35.339	43.650	35.301	35.239	5.62	1.23	0.50	4.90	0.00	2.476	1.296	199	222222222
21	301.8	11.144	11.106	26.749	35.514	43.895	34.990	34.951	5.64	2.41	0.84	10.40	0.00	2.684	1.327	299	222222222
20	403.4	9.827	9.781	26.779	35.603	44.039	34.730	34.725	5.69	3.43	1.03	14.00	0.00	2.660	1.388	399	222222222
19	499.5	9.417	9.361	26.814	35.657	44.110	34.686	34.685	5.51	4.10	1.19	16.50	0.00	2.284	1.208	495	222222222
18	600.4	8.945	8.879	26.845	35.709	44.183	34.626	34.637	5.45	5.29	1.31	18.30	0.00	2.180	1.153	594	222222222
17	699.0	8.306	8.232	26.890	35.785	44.287	34.556	34.558	5.22	7.65	1.52	21.10	0.00	1.690	0.940	692	222222222
16	798.1	7.259	7.180	26.988	35.931	44.480	34.485	34.493	4.69	14.89	1.77	25.60	0.00	0.820	0.422	790	222222222
15	899.8	5.774	5.695	27.131	36.146	44.761	34.418	34.413	4.51	25.33	2.05	29.50	0.00	0.416	0.243	890	222222222
14	999.6	4.548	4.468	27.243	36.319	44.992	34.379	34.385	4.51	36.11	2.28	32.00	0.00	0.254	0.145	989	222222222
13	1099.8	3.805	3.723	27.340	36.455	45.164	34.404	34.413	4.23	49.58	2.40	33.90	0.00			1088	222222255
12	1200.6	3.495	3.408	27.408	36.538	45.262	34.450	34.446	3.98	59.67	2.48	34.80	0.00			1187	222222255
11	1301.4	3.291	3.197	27.470	36.611	45.344	34.503	34.498	3.82	67.41	2.52	35.40	0.00			1287	222222255
10	1399.8	3.108	3.008	27.519	36.669	45.411	34.542	34.533	3.67	74.64	2.54	35.50	0.00			1384	222222255
9	1499.8	1.944	1.848	27.642	36.855	45.655	34.574	34.572	3.67	78.67	2.53	35.50	0.00			1482	222222255
8	1598.2	2.026	2.712	27.598	36.761	45.517	34.606	34.610	3.65	83.72	2.51	35.10	0.00			1579	222222255
7	1699.1	2.700	2.579	27.634	36.805	45.567	34.638	34.639	3.67	87.75	2.52	35.30	0.00			1679	222222255
6	1799.2	2.603	2.475	27.665	36.842	45.609	34.666	34.668	3.71	92.11	2.49	35.00	0.00			1777	222222255
5	1902.6	2.501	2.505	27.691	36.873	45.645	34.687		3.74	96.30	2.50	34.40	0.00			1879	252222255
4	1999.8	2.404	2.261	27.711	36.899	45.676	34.701	34.700	3.77	99.32	2.51	34.10	0.00			1975	222222255
3	2202.4	2.190	2.033	27.744	36.944	45.733	34.719	34.717	3.87	105.69	2.45	33.80	0.00			2174	222222255
2	2402.2	2.061	1.888	27.761	36.969	45.765	34.726	34.729	3.94	108.37	2.40	33.70	0.00			2370	222222255
1	2589.0	1.857	1.671	27.781	37.001	45.808	34.730	34.734	4.10	112.23	2.38	33.60	0.00			2553	222222255

CRUISE: CD 29 STA: 100 DATE (D/M/Y): 14-12-87 TIME: 1647 LAT: 34 9.80 S LONG 110 59 81 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81898E-04 1/S SOUND SPEED= 1490.9 M/S Depth= 2123 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC METERS	J/M2 10-5	C/DB 10-3	1/DB 10-3	(m s)-1 10-12	CPH	METERS
0	17.406	35.760	5.86	17.406	26.001	34.524	42.678	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.406	35.760	5.86	17.406	26.001	34.524	42.678	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.081	35.705	5.69	17.078	26.038	34.572	42.738	0.040	0.0	-149.10	-18.777	-1686.18	8.137	19.9
30	15.566	35.557	5.97	15.561	26.277	34.866	43.082	0.059	0.1	-47.98	-0.673	-831.29	5.713	29.8
40	15.150	35.528	6.06	15.144	26.348	34.952	43.182	0.076	0.1	-43.52	-3.164	-581.63	4.779	39.8
50	14.993	35.541	5.99	14.985	26.394	35.003	43.238	0.092	0.2	3.43	3.245	-139.86	2.344	49.7
100	13.966	35.455	5.75	13.952	26.550	35.198	43.470	0.172	0.8	-26.01	-3.176	-248.57	3.124	99.4
125	13.456	35.362	5.74	13.439	26.585	35.253	43.544	0.209	1.3	-19.96	-3.771	-98.82	1.970	124.2
150	13.015	35.283	5.69	12.994	26.614	35.300	43.608	0.246	1.8	-14.08	-2.436	-80.90	1.782	149.0
200	12.448	35.183	5.64	12.421	26.650	35.360	43.690	0.318	7.1	-13.88	-2.502	-65.77	1.607	198.7
250	11.481	35.007	5.58	11.449	26.699	35.450	43.818	0.389	4.7	-21.11	-3.746	-89.48	1.875	248.3
300	10.549	34.846	5.59	10.513	26.743	35.534	43.940	0.458	6.6	-14.70	-2.407	-64.49	1.591	298.0
350	9.988	34.755	5.76	9.947	26.770	35.586	44.015	0.526	8.9	-7.44	-1.120	-36.00	1.189	347.6
400	9.714	34.718	5.58	9.668	26.788	35.617	44.058	0.593	11.4	-4.02	-0.447	-28.71	1.062	397.2
450	9.487	34.697	5.49	9.436	26.810	35.649	44.100	0.659	14.3	-5.60	-0.513	-46.20	1.347	446.7
500	9.206	34.666	5.48	9.150	26.833	35.685	44.147	0.725	17.5	-5.38	-0.672	-32.39	1.128	496.3
600	8.622	34.595	5.43	8.557	26.871	35.750	44.238	0.856	24.8	-8.17	-0.866	-55.19	1.472	595.4
700	7.697	34.524	4.82	7.626	26.956	35.878	44.406	0.981	33.2	-11.72	-0.701	-105.82	2.038	694.5
800	6.193	34.434	4.58	6.120	27.090	36.084	44.680	1.097	42.0	-15.57	-0.895	-128.57	2.247	793.5
900	5.002	34.380	4.47	4.928	27.192	36.245	44.897	1.199	50.8	-10.19	-0.207	-97.81	1.960	892.4
1000	4.041	34.379	4.44	3.965	27.296	36.398	45.096	1.290	59.7	-7.72	0.126	-88.08	1.860	991.3
1200	3.445	34.475	3.90	3.358	27.432	36.565	45.291	1.449	77.5	-2.32	0.481	-54.06	1.457	1188.9
1400	3.070	34.559	3.66	2.970	27.536	36.687	45.431	1.587	95.7	-2.00	0.368	-43.78	1.311	1386.2
1600	2.752	34.620	3.71	2.639	27.614	36.783	45.542	1.708	114.2	-1.08	0.263	-27.81	1.045	1583.4
1800	2.573	34.669	3.76	2.445	27.670	36.848	45.617	1.818	133.3	-0.96	0.223	-24.25	0.976	1780.4
2000	2.380	34.703	3.80	2.237	27.715	36.904	45.682	1.920	152.9	-0.96	0.105	-17.12	0.820	1977.2
2123	2.267	34.714	3.85	2.115	27.733	36.929	45.713	1.979	165.4	-0.69	0.060	-17.12	0.000	2098.1

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
18	16.2	17.048	17.045	26.087	34.622	42.788	35.759	35.709	5.63	1.37		0.00	0.00			16	222252255
17	103.8	13.764	13.750	26.589	35.245	43.523	35.451	35.418	5.73	1.20		2.60	0.00			102	222252255
16	201.7	12.436	12.408	26.652	35.362	43.692	35.182	35.183	5.73	1.71		5.90	0.00			200	222252255
15	300.0	10.603	10.567	26.737	35.526	43.929	34.850	34.851	5.71	2.71		11.30	0.00			297	222252255
14	401.7	9.771	9.724	26.778	35.604	44.043	34.717	34.720	5.66	3.56		14.20	0.00			398	222252255
13	499.4	9.335	9.278	26.812	35.658	44.116	34.666	34.678	5.48	4.57		16.50	0.00			494	222252255
12	599.1	8.717	8.652	26.856	35.731	44.215	34.595	34.604	5.47	3.59		18.50	0.00			593	222252255
11	699.6	7.829	7.758	26.937	35.853	44.376	34.525	34.525	4.91	10.96		23.00	0.00			693	222252255
10	802.1	6.285	6.212	27.076	36.066	44.658	34.431	34.436	4.61	20.55		27.50	0.00			794	222252255
9	900.0	5.001	4.927	27.192	36.246	44.897	34.380	34.378	4.61	29.80		30.20	0.00			891	222252255
8	999.8	4.071	3.995	27.293	36.394	45.089	34.379	34.382	4.47	41.74		32.20	0.00			989	222252255
7	1096.6	3.698	3.617	27.368	36.487	45.201	34.425	34.432	4.16	53.35		33.80	0.00			1085	222252255
6	1190.0	3.452	3.365	27.429	36.562	45.287	34.472	34.471	3.88	63.29		34.50	0.00			1183	222252255
5	1399.5	3.070	2.970	27.535	36.687	45.430	34.558	34.555	3.66	76.43		35.00	0.00			1384	222252255
3	1799.8	2.572	2.444	27.670	36.848	45.617	34.669	34.670	3.76	91.76		34.10	0.00			1778	222252255
2	1998.7	2.370	2.228	27.715	36.905	45.684	34.703	34.706	3.81	99.35		33.80	0.00			1973	222252255
1	2122.7	2.268	2.117	27.731	36.926	45.711	34.711	34.708	3.83	99.71		33.90	0.00			2095	222252255

CRUISE: CD 29 STA: 101 DATE (D/M/Y): 15-12-87 TIME: 0012 LAT: 34 9.66 S LONG: 112 9.72 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81893E-04 1/S SOUND SPEED= 1491.4 M/S Depth= 2627 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	17.762	35.832	5.28	17.762	25.969	34.479	42.622	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	17.762	35.832	5.28	17.762	25.969	34.480	42.622	0.002	0.0	-0.34	0.000	0.00	0.000	1.0
20	17.713	35.835	5.57	17.710	25.985	34.497	42.641	0.041	0.0	-32.58	-1.287	-561.05	4.694	19.9
30	17.246	35.812	5.57	17.241	26.080	34.608	42.767	0.060	0.1	-35.78	-2.984	-509.41	4.473	29.8
40	16.933	35.780	5.50	16.926	26.131	34.670	42.839	0.079	0.2	-28.73	-1.652	-295.75	3.408	39.8
50	16.710	35.755	5.45	16.702	26.166	34.712	42.889	0.098	0.2	-36.89	-5.552	-358.29	3.751	49.7
100	15.040	35.558	5.49	15.025	26.397	35.005	43.238	0.185	0.9	-25.64	-3.048	-268.41	3.247	99.4
125	14.415	35.478	5.51	14.396	26.473	35.104	43.360	0.225	1.4	-17.06	-1.789	-194.07	2.761	124.2
150	14.109	35.440	5.52	14.087	26.510	35.153	43.420	0.265	1.9	-19.99	-3.424	-127.44	2.237	149.1
200	13.140	35.264	5.57	13.112	26.575	35.257	43.561	0.341	3.3	-20.38	-3.643	-109.92	2.078	198.7
250	11.669	35.016	5.48	11.637	26.671	35.414	43.775	0.415	5.0	-29.13	-4.624	-162.41	2.525	248.4
300	10.711	34.867	5.67	10.674	26.731	35.516	43.915	0.485	6.9	-15.17	-2.170	-87.13	1.850	298.0
350	9.790	34.728	5.57	9.749	26.783	35.608	44.046	0.552	9.2	-10.46	-1.360	-62.68	1.569	347.6
400	9.486	34.698	5.45	9.440	26.811	35.650	44.100	0.618	11.7	-5.34	-0.385	-50.04	1.402	397.2
450	9.191	34.670	5.38	9.141	26.837	35.689	44.152	0.684	14.5	-6.65	-0.817	-40.14	1.256	446.8
500	8.912	34.635	5.41	8.857	26.855	35.720	44.195	0.748	17.7	-5.91	-0.689	-37.04	1.206	496.3
600	8.123	34.549	5.03	8.061	26.911	35.813	44.322	0.875	24.8	-10.84	-0.802	-90.00	1.800	595.4
700	6.390	34.472	4.67	6.023	27.027	35.987	44.551	0.995	32.7	-14.77	-0.813	-127.19	2.235	694.5
800	5.293	34.395	4.53	5.226	27.170	36.208	44.845	1.101	40.8	-14.07	-0.530	-121.63	2.186	793.5
900	4.186	34.382	4.42	4.118	27.282	36.377	45.067	1.193	48.8	-7.58	0.260	-94.10	1.922	892.4
1000	3.613	34.424	4.15	3.540	27.375	36.498	45.216	1.276	56.8	-3.60	0.473	-65.95	1.609	991.3
1200	3.120	34.518	3.81	3.036	27.497	36.646	45.387	1.420	72.9	-2.09	0.444	-48.68	1.383	1188.8
1400	2.840	34.598	3.67	2.742	27.587	36.750	45.505	1.545	89.5	-1.03	0.349	-32.37	1.128	1386.2
1600	2.647	34.656	3.67	2.535	27.652	36.826	45.590	1.657	106.6	-1.22	0.277	-30.06	1.087	1583.4
1800	2.424	34.696	3.78	2.298	27.704	36.890	45.666	1.758	124.2	-1.02	0.137	-19.33	0.871	1780.3
2000	2.234	34.717	3.88	2.094	27.737	36.934	45.720	1.853	142.5	-0.95	0.067	-14.36	0.751	1977.1
2200	2.088	34.725	3.95	1.933	27.757	36.962	45.756	1.944	161.9	-0.84	0.030	-11.09	0.660	2173.7
2400	1.916	34.730	4.05	1.746	27.775	36.991	45.794	2.031	182.5	-0.78	0.015	-9.80	0.628	2370.1
2600	1.761	34.731	4.15	1.576	27.789	37.014	45.826	2.116	204.1	-1.77	0.005	-9.80	0.000	2566.4
2635	1.601	34.731	4.25	1.416	27.800	37.034	45.855	2.130	207.9	-2.10	0.002	-9.80	0.000	2600.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
19	2.4	17.793	17.793	25.118	33.641	41.796	34.731	35.839	5.51	1.73	0.16	0.10	0.00	2.119	1.151	2	222222222
18	102.9	14.693	14.678	26.469	35.089	43.335	35.552	35.513	5.57	1.23	0.33	1.00	0.00	2.434	1.286	102	222222222
17	201.9	12.781	12.753	26.648	35.343	43.660	35.264	35.202	5.55	1.24	0.55	5.60	0.00	2.520	1.386	200	222222222
16	299.4	10.523	10.487	26.765	35.557	43.964	34.868	34.832	5.65	2.76	0.92	12.10	0.00	2.697	1.438	296	222222222
15	400.6	9.417	9.372	26.871	35.663	44.116	34.697	34.691	5.49	4.12	1.18	16.50	0.00	2.367	1.270	397	222222222
14	501.5	8.855	8.801	26.864	35.731	44.209	34.634	34.622	5.44	5.13	1.35	18.60	0.00	2.036	1.112	497	222222222
13	600.9	8.195	8.132	26.900	35.799	44.305	34.549	34.554	5.18	8.35	1.52	21.50	0.00	1.459	0.769	595	222222222
12	699.7	6.870	6.804	27.030	35.991	44.556	34.472	34.465		17.47	1.86	26.80	0.00	0.608	0.346	693	225222222
11	799.7	5.213	5.147	27.180	36.222	44.863	34.396	34.390	4.54	28.78	2.13	30.40	0.00	0.377	0.203	792	222222222
10	901.1	4.149	4.080	27.286	36.383	45.074	34.382	34.378	4.43	41.44	2.32	32.70	0.00	0.206	0.106	892	222222222
8	1098.5	3.330	3.252	27.438	36.576	45.307	34.469	34.464	3.97	61.86	2.48	34.80	0.00	0.037		1087	222222225
7	1298.9	2.947	2.856	27.548	36.706	45.455	34.561	34.557	3.71	76.20	2.50	35.20	0.00	0.016	0.000	1284	222222222
6	1502.0	2.746	2.641	27.620	36.789	45.548	34.628	34.620	3.69	84.47	2.49	34.80	0.00			1485	222222255
5	1697.5	2.523	2.405	27.681	36.862	45.632	34.679	34.679	3.72	94.08	2.47	34.30	0.00			1677	222222255
4	1898.2	2.332	2.199	27.722	36.913	45.693	34.708	34.706	3.80	101.17	2.42	34.00	0.00	0.004	0.000	1875	222222222
3	2101.4	2.148	2.000	27.749	36.951	45.741	34.722	34.721	3.93	105.38	2.38	33.70	0.00			2074	222222255
2	2401.1	1.920	1.749	27.775	36.990	45.794	34.730	34.730	4.09	109.42	2.35	33.30	0.00			2369	222222255
1	2632.2	1.609	1.424	27.800	37.033	45.854	34.731	34.731	4.30	113.80	2.34	33.10	0.00			2595	222222255

CRUISE: CD 29 STA: 102 DATE (D/M/Y): 15-12-87 TIME: 1201 LAT 34 9.26 S LONG: 113 29 39 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81879E-04 1/S SOUND SPEED= 1493.7 M/S Depth= 3023 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	I/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.766	35.710	5.71	18.766	25.625	34.104	42.218	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.766	35.710	5.71	18.766	25.625	34.104	42.218	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.779	35.806	5.50	18.775	25.696	34.174	42.287	0.047	0.0	-4.61	4.560	-373.89	3.832	19.9
30	18.628	35.821	5.52	18.623	25.746	34.229	42.346	0.069	0.1	-23.88	-0.958	-426.73	4.094	29.8
40	18.407	35.823	5.51	18.400	25.804	34.294	42.417	0.092	0.2	-16.93	0.460	-370.35	3.814	39.8
50	18.317	35.829	5.50	18.309	25.832	34.324	42.451	0.113	0.3	-3.56	0.577	-113.30	2.110	49.7
100	16.410	35.707	5.44	16.393	26.202	34.759	42.946	0.216	1.1	-58.50	-5.712	-744.02	5.406	99.4
125	14.949	35.541	5.50	14.931	26.405	35.016	43.254	0.259	1.6	-42.42	-5.669	-420.41	4.064	124.3
150	14.160	35.438	5.57	14.138	26.497	35.138	43.404	0.299	2.1	-23.92	-4.026	-168.52	2.573	149.1
200	13.195	35.252	5.47	13.167	26.555	35.235	43.537	0.376	3.5	-21.63	-3.693	-128.20	2.244	198.8
250	12.004	35.049	5.44	11.971	26.633	35.362	43.710	0.451	5.2	-26.99	-4.415	-149.52	2.423	248.4
300	10.704	34.857	5.50	10.667	26.725	35.509	43.909	0.522	7.2	-20.85	-3.078	-116.28	2.137	298.0
350	9.919	34.735	5.60	9.878	26.766	35.586	44.018	0.590	9.5	-6.63	-0.617	-56.27	1.487	347.6
400	9.779	34.740	5.45	9.733	26.794	35.620	44.058	0.657	12.0	-2.87	0.021	-41.83	1.282	397.2
450	9.537	34.719	5.45	9.486	26.820	35.656	44.104	0.724	14.9	-6.21	-0.641	-46.75	1.355	446.8
500	9.015	34.647	5.44	8.960	26.848	35.709	44.179	0.789	18.1	-7.76	-1.003	-43.24	1.303	496.4
600	8.158	34.555	5.19	8.096	26.910	35.811	44.318	0.917	25.2	-11.67	-0.937	-93.14	1.913	595.5
700	6.723	34.466	4.65	6.657	27.045	36.013	44.584	1.035	33.1	-16.43	-0.852	-143.74	2.376	694.5
800	5.271	34.407	4.43	5.204	27.182	36.221	44.859	1.139	41.0	-12.72	-0.417	-112.91	2.106	793.5
900	4.209	34.392	4.29	4.220	27.280	36.369	45.053	1.231	49.0	-4.49	0.509	-79.17	1.763	892.4
1000	4.027	34.460	3.77	3.951	27.362	36.464	45.160	1.315	57.1	-2.99	0.428	-57.71	1.506	991.3
1200	3.475	34.526	3.57	3.387	27.470	36.600	45.324	1.465	73.9	-2.53	0.250	-41.52	1.277	1188.9
1400	3.015	34.571	3.64	2.916	27.550	36.705	45.451	1.598	91.5	-1.77	0.334	-39.28	1.242	1386.2
1600	2.757	34.635	3.64	2.644	27.626	36.794	45.553	1.717	109.7	-1.33	0.281	-31.63	1.115	1583.4
1800	2.555	34.681	3.70	2.427	27.681	36.860	45.629	1.825	128.4	-1.09	0.205	-24.51	0.981	1780.4
2000	2.355	34.707	3.75	2.213	27.720	36.910	45.690	1.924	147.6	-1.08	0.098	-17.80	0.836	1977.2
2200	2.177	34.721	3.84	2.020	27.747	36.947	45.737	2.018	167.7	-0.85	0.046	-12.28	0.695	2173.8
2400	2.036	34.727	3.93	1.864	27.763	36.972	45.770	2.108	188.9	-0.70	0.031	-9.87	0.623	2370.2
2600	1.888	34.731	4.06	1.700	27.779	36.997	45.803	2.196	211.2	-0.87	0.004	-10.38	0.639	2566.5
2800	1.754	34.730	4.13	1.550	27.790	37.016	45.830	2.281	234.7	-0.85	-0.008	-9.53	0.612	2762.5
3000	1.582	34.729	4.23	1.363	27.803	37.040	45.863	2.364	259.1	-1.14	-0.006	-9.53	0.000	2958.4
3041	1.512	34.728	4.24	1.291	27.807	37.048	45.876	2.380	264.1	-1.30	-0.004	-9.53	0.000	2998.5

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
24	0.0	18.734	18.734	24.882	33.375	41.501	34.728	35.876	5.32	2.39	0.20	0.10	0.00	2.098	1.156	0	222222222
23	102.9	15.910	15.894	26.304	34.879	43.002	35.690	35.659	5.51	1.71	0.30	0.60	0.00	2.216	1.060	102	222222222
22	201.7	13.208	13.180	26.545	35.225	43.527	35.243	35.249	5.60	1.20	0.54	4.20	0.00	2.593	1.345	200	222222222
21	303.1	10.853	10.815	26.695	35.474	43.868	34.853	34.875	5.63	2.39	0.90	10.80	0.00	2.786	1.434	300	222222222
20	402.3	9.711	9.665	26.805	35.634	44.075	34.739	34.713	5.62	3.92	1.13	14.80	0.00	2.678	1.349	398	222222222
19	503.1	9.057	9.001	26.838	35.697	44.166	34.642	34.646	5.46	5.29	1.29	18.00	0.00	2.142	1.115	498	222222222
18	600.3	8.233	8.170	26.899	35.796	44.301	34.555	34.561	5.25	8.35	1.50	20.90	0.00	1.603	0.841	594	222222222
17	695.4	6.866	6.800	27.027	35.988	44.553	34.467	34.472	4.62	17.88	1.06	26.40	0.00	0.701	0.387	691	222222222
16	800.7	5.254	5.187	27.183	36.223	44.862	34.406	34.406	4.42	31.33	2.19	31.20	0.00	0.267	0.152	793	222222222
15	899.7	4.342	4.273	27.275	36.361	45.043	34.393	34.401	4.34	42.20	2.32	32.50	0.00	0.208	0.100	890	222222222
14	999.4	4.039	3.964	27.360	36.462	45.158	34.460	34.453	3.83	58.86	2.49	34.50	0.00	0.056	0.041	989	222222222
13	1098.4	3.772	3.690	27.418	36.532	45.241	34.497	34.486	3.66	66.31	2.55	35.10	0.00	0.036	0.039	1087	222222222
12	1200.3	3.471	3.383	27.471	36.601	45.325	34.526	34.516	3.56	73.43	2.55	35.40	0.00	0.029	0.000	1187	222222222
11	1300.4	3.174	3.081	27.513	36.659	45.397	34.543	34.538	3.65	75.10	2.56	35.40	0.00			1286	222222255
10	1398.5	3.021	2.922	27.550	36.704	45.450	34.571	34.567	3.63	79.82	2.55	35.70	0.00			1383	222222255
9	1600.5	2.757	2.643	27.626	36.794	45.553	34.635	34.636	3.65	88.44	2.54	35.00	0.00			1582	222222255
8	1791.9	2.550	2.431	27.679	36.858	45.627	34.679	34.681	3.69	96.39	2.51	34.80	0.00			1770	222222255
7	2000.0	2.352	2.209	27.720	36.910	45.690	34.707	34.710	3.74	103.97	.48	34.30	0.00			1975	222222255
6	2204.6	2.175	2.018	27.747	36.947	45.737	34.721	34.721	3.82	108.85	2.46	34.10	0.00			2176	222222255
5	2402.7	2.037	1.864	27.764	36.973	45.770	34.727	34.732	3.96	110.84	2.44	33.80	0.00			2370	222222255
4	2600.8	1.883	1.695	27.780	36.998	45.804	34.731	34.733	4.10	112.48	2.39	33.60	0.00			2564	222222255
3	2802.5	1.748	1.544	27.790	37.017	45.831	34.730	34.728	4.14	116.33	2.40	33.60	0.00			2762	222222255
2	3005.0	1.566	1.347	27.805	37.042	45.867	34.730	34.729	4.29	117.31	2.38	33.30	0.00	0.000	0.000	2960	222222222
1	3037.4	1.513	1.292	27.807	37.048	45.875	34.728	34.734	4.29	118.60	2.37	33.30	0.00			2992	222222255

CRUISE: CD 29 STA: 103 DATE (D/M/Y): 15-12-87 TIME: 1613 LAT: 34 10.10 S LONG: 113 43.81 E

GRAVITY= 9.7966 M/S CORIOLIS= - .81909E-04 1/S SOUND SPEED= 1491.0 M/S Depth= 2208 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	0-V CPH	DEPTH METERS
0	18.348	35.875	4.71	18.348	25.857	34.348	42.473	0.000	0.0	-0.17	0.000	0.00	0.000	0.0
1	18.348	35.875	4.71	18.347	25.857	34.348	42.473	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.369	35.874	5.61	18.366	25.852	34.342	42.466	0.043	0.0	-0.05	0.013	-1.00	0.266	19.9
30	18.319	35.870	5.52	18.314	25.861	34.353	42.479	0.064	0.1	-24.43	-1.945	-371.75	3.821	29.8
40	17.964	35.849	5.56	17.957	25.934	34.438	42.575	0.085	0.2	-38.01	-2.261	-611.08	4.922	39.8
50	17.716	35.835	5.65	17.707	25.985	34.497	42.642	0.106	0.3	-16.77	-0.744	-284.94	3.345	49.7
100	15.291	35.600	5.70	15.275	26.375	34.972	43.197	0.200	1.0	-50.48	-5.791	-567.76	4.721	99.4
125	14.666	35.507	5.63	14.647	26.441	35.063	43.310	0.241	1.5	-20.77	-3.735	-125.58	2.221	124.3
150	13.997	35.389	5.69	13.975	26.494	35.142	43.413	0.281	2.0	-19.88	-3.287	-140.14	2.346	149.1
200	13.209	35.258	5.61	13.181	26.557	35.236	43.537	0.359	3.4	-19.88	-3.575	-107.18	2.051	198.7
250	11.963	35.050	5.58	11.931	26.641	35.372	43.722	0.433	5.1	-25.28	-3.907	-153.20	2.453	248.4
300	10.881	34.896	5.48	10.844	26.723	35.500	43.892	0.504	7.1	-20.94	-2.982	-126.59	2.229	298.0
350	9.992	34.769	5.47	9.951	26.780	35.596	44.025	0.572	9.4	-12.57	-1.620	-78.44	1.755	347.6
400	9.578	34.720	5.44	9.533	26.812	35.647	44.093	0.639	11.9	-6.17	-0.703	-42.47	1.291	397.2
450	9.265	34.682	5.46	9.214	26.835	35.684	44.143	0.704	14.7	-5.92	-0.653	-40.97	1.268	446.8
500	8.923	34.639	5.36	8.869	26.857	35.721	44.196	0.769	17.9	-8.84	-1.175	-46.39	1.350	496.4
600	7.802	34.528	5.04	7.741	26.942	35.858	44.382	0.894	24.9	-13.41	-0.963	-110.78	2.086	595.5
700	6.293	34.445	4.57	6.229	27.085	36.074	44.664	1.009	32.5	-15.35	-0.761	-131.97	2.276	694.5
800	4.959	34.394	4.43	4.894	27.207	36.262	44.915	1.110	40.2	-10.46	-0.061	-110.17	2.080	793.5
900	4.376	34.416	4.18	4.306	27.290	36.374	45.054	1.200	48.0	-4.09	0.365	-65.90	1.609	892.4
1000	4.009	34.451	3.91	3.933	27.356	36.459	45.157	1.283	56.1	-1.83	0.712	-63.65	1.581	991.3
1200	3.609	34.537	3.41	3.520	27.467	36.590	45.306	1.434	72.9	-2.38	0.212	-37.92	1.220	1188.8
1400	3.133	34.568	3.61	3.032	27.538	36.686	45.426	1.569	90.8	-1.71	0.303	-36.69	1.200	1386.2
1600	2.819	34.623	3.64	2.705	27.611	36.776	45.532	1.691	109.4	-1.44	0.243	-30.37	1.092	1583.4
1800	2.585	34.673	3.67	2.457	27.672	36.850	45.618	1.801	128.5	-1.14	0.193	-24.22	0.975	1780.4
2000	2.385	34.704	3.75	2.243	27.715	36.903	45.682	1.902	148.1	-1.10	0.117	-19.27	0.870	1977.2
2200	2.193	34.719	3.82	2.036	27.744	36.944	45.732	1.997	168.4	-1.14	0.058	-19.27	0.800	2173.8
2223	2.152	34.721	3.84	1.994	27.749	36.951	45.741	2.007	170.8	-1.33	0.066	-19.27	0.800	2196.4

BOTL NO.	PRES DBAR	CTD IPT568	TEMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
18	13.0	18.425	18.423	25.837	34.326	42.448	35.874	35.869	5.45	2.33	0.13	0.00	0.00				12	222222255
17	101.6	15.185	15.169	26.394	34.996	43.224	35.595	35.578	5.61	1.66	0.21	0.40	0.00				100	222222255
16	200.2	13.245	13.217	26.546	35.274	43.524	35.253	35.264	5.66	1.32	0.44	4.00	0.00				198	222222255
15	301.3	10.986	10.948	26.704	35.476	43.865	34.895	34.906	5.51	2.66	0.84	11.00	0.00				298	222222255
14	401.7	9.560	9.514	26.815	35.651	44.098	34.720	34.716	5.51	4.17	1.12	15.70	0.00				398	222222255
13	497.9	8.890	8.836	26.864	35.730	44.206	34.642	34.630	5.47	5.69	1.29	18.50	0.00				493	222222255
12	598.4	7.791	7.731	26.943	35.860	44.384	34.528	34.527	5.00	11.56	1.56	23.20	0.00				592	222222255
11	699.3	6.241	6.178	27.092	36.083	44.676	34.446	34.433	4.58	22.33	1.91	28.10	0.00				692	222222255
10	800.3	4.900	4.835	27.214	36.272	44.927	34.394	34.389	4.50	33.76	2.16	31.20	0.00				792	222222255
9	900.5	4.343	4.273	27.294	36.380	45.062	34.417	34.419	4.11	48.05	2.38	33.30	0.00				891	222222255
8	999.7	3.998	3.922	27.357	36.460	45.159	34.450	34.447	3.86	57.63	2.41	34.50	0.00				989	222222255
7	1100.4	3.794	3.712	27.423	36.537	45.245	34.507	34.502	3.55	69.57	2.49	35.50	0.00				1089	222222255
6	1197.6	3.617	3.528	27.465	36.587	45.304	34.536	34.533	3.45	76.29	2.53	35.80	0.00				1185	222222255
5	1396.9	3.122	3.022	27.538	36.686	45.427	34.567	34.569	3.79	80.32	2.49	35.60	0.00				1381	222222255
4	1599.2	2.805	2.691	27.612	36.778	45.534	34.623	34.623	3.64	86.88	2.47	35.10	0.00				1580	222222255
3	1799.5	2.580	2.453	27.673	36.850	45.618	34.673	34.670	3.72	94.44	2.43	34.60	0.00				1778	222222255
2	1999.8	2.381	2.239	27.715	36.904	45.683	34.704	34.704	3.76	102.00	2.40	34.30	0.00				1975	222222255
1	2222.0	2.150	1.992	27.749	36.951	45.742	34.721	34.712	3.87	109.57	2.38	34.20	0.00				2193	222222255

CRUISE: CD 29 STA: 104 DATE (D/M/Y): 15-12-87 TIME: 1945 LAT: 34 10.06 S LONG: 113 59.84 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81907E-04 1/S SOUND SPEED= 1491.0 M/S Depth= 1508 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.898	35.883	4.71	18.898	25.724	34.197	42.305	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.898	35.883	4.71	18.898	25.724	34.197	42.305	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.895	35.889	5.35	18.892	25.730	34.203	42.311	0.045	0.0	-7.80	-0.745	-114.22	2.118	19.9
30	18.696	35.874	5.37	18.691	25.769	34.249	42.363	0.068	0.1	-27.69	-1.633	-464.21	4.269	29.8
40	18.407	35.865	5.47	18.400	25.836	34.325	42.448	0.090	0.2	-24.55	-0.079	-491.11	4.391	39.8
50	18.251	35.864	5.39	18.242	25.875	34.369	42.497	0.111	0.3	-8.41	-0.152	-159.85	2.505	49.7
100	15.683	35.638	5.58	15.667	26.316	34.899	43.111	0.210	1.0	-53.73	-6.125	-611.96	4.902	99.4
125	14.568	35.492	5.52	14.550	26.451	35.076	43.327	0.251	1.5	-33.47	-4.724	-304.33	3.457	124.3
150	13.987	35.403	5.46	13.965	26.507	35.155	43.426	0.291	2.1	-18.40	-2.807	-144.27	2.380	149.1
200	13.009	35.237	5.54	12.981	26.581	35.268	43.577	0.368	3.4	-19.55	-3.270	-118.22	2.154	198.7
250	11.831	35.039	5.45	11.799	26.658	35.395	43.749	0.441	5.1	-25.94	-3.989	-155.05	2.467	248.4
300	10.682	34.859	5.39	10.646	26.730	35.516	43.916	0.511	7.1	-18.42	-2.783	-98.04	1.962	298.0
350	9.817	34.732	5.56	9.776	26.781	35.605	44.042	0.579	9.3	-13.44	-1.850	-74.39	1.709	347.6
400	9.527	34.703	5.40	9.482	26.808	35.645	44.093	0.645	11.9	-5.08	-0.323	-0.36	1.406	397.2
450	9.196	34.668	5.48	9.146	26.835	35.687	44.150	0.711	14.7	-6.80	-0.872	-38.89	1.236	446.8
500	8.795	34.617	5.52	8.741	26.860	35.731	44.211	0.775	17.8	-9.50	-1.118	-58.04	1.510	496.4
600	7.487	34.511	4.93	7.427	26.974	35.905	44.442	0.900	24.8	-18.32	-1.072	-163.21	2.531	595.5
700	6.070	34.434	4.58	6.007	27.105	36.104	44.705	1.010	32.1	-11.82	-0.512	-103.56	2.017	694.5
800	4.931	34.398	4.39	4.866	27.213	36.270	44.924	1.109	39.7	-8.86	-0.117	-88.09	1.860	793.5
900	4.313	34.415	4.14	4.244	27.295	36.383	45.066	1.199	47.5	-5.00	0.355	-74.63	1.712	892.4
1000	4.078	34.459	3.82	4.002	27.356	36.455	45.149	1.283	55.5	-1.31	0.363	-36.71	1.201	991.3
1200	3.734	34.515	3.53	3.644	27.436	36.553	45.264	1.438	72.9	-2.38	0.238	-39.63	1.247	1188.8
1400	3.261	34.562	3.56	3.159	27.521	36.663	45.397	1.578	91.5	-1.85	0.220	-33.09	1.140	1386.2
1503	3.093	34.586	3.53	2.983	27.557	36.707	45.450	1.645	101.4	-1.71	0.231	-33.09	0.000	1487.8

BOTL	PRES	CTDTP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUAL1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
14	3.3	18.832	18.832	25.747	34.222	42.332	35.891	35.894	5.37	1.75	0.11	0.00	0.00			3	22222255
13	101.5	15.332	15.316	26.388	34.984	43.207	35.629	35.594	5.54	1.42	0.25	0.00	0.00			100	2 2222255
12	204.2	12.958	12.930	26.585	35.275	43.585	35.229	35.227	5.56	1.43	0.51	5.00	0.00			202	22222255
11	303.4	10.694	10.657	26.725	35.510	43.910	34.855	34.856	5.60	2.44	0.87	11.30	0.00			300	22222255
10	404.2	9.490	9.444	26.813	35.652	44.102	34.702	34.696	5.54	3.95	1.14	15.90	0.00			400	22222255
9	497.8	8.726	8.672	26.873	35.746	44.229	34.620	34.612	5.46	5.47	1.31	18.80	0.00			493	22222255
8	600.8	7.124	7.066	27.022	35.970	44.523	34.508	34.482	4.72	15.33	1.73	25.50	0.00			595	22222255
7	701.3	6.064	6.002	27.105	36.105	44.706	34.434	34.431	4.55	23.03	1.96	28.60	0.00			694	22222255
6	799.3	4.955	4.890	27.211	36.266	44.919	34.398	34.397	4.41	34.23	2.17	31.30	0.00			791	22222255
5	901.2	4.395	4.325	27.288	36.371	45.050	34.416	34.412	4.21	44.10	2.28	32.90	0.00			892	22222255
4	1001.1	4.081	4.005	27.355	36.454	45.149	34.459	34.454	3.81	57.48	2.43	34.40	0.00			991	22222255
3	1099.4	3.937	3.853	27.398	36.504	45.205	34.493	34.485	3.57	65.67	2.48	35.20	0.00			1088	22222255
2	1299.1	3.473	3.377	27.484	36.615	45.338	34.542	34.540	3.44	76.37	2.54	35.00	0.00			1285	22222255
1	1501.9	3.090	2.981	27.557	36.708	45.450	34.587	34.587	3.50	82.23	2.52	35.30	0.00			1485	22222255

CRUISE: CD 29 STA: 105 DATE (D/M/Y): 15-12-87 TIME: 2240 LAT: 34 10.93 S LONG: 114 14.53 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81938E-04 1/S SOUND SPEED= 1494.5 M/S Depth= 1078 Cor Meters

PRES DBAR	TMP IPT568	SALT PSS78	OXYG ML/L	PTMP IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	DYN-HT DYNAMIC METERS	PE J/M2 10-5	GRD-PT C/DB 10-3	GRD-S 1/DB 10-3	POT-V (m s)-1 10-12	B-V CPH	DEPTH METERS
0	19.026	35.889	5.25	19.026	25.695	34.164	42.269	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.026	35.889	5.25	19.026	25.695	34.165	42.269	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.910	35.876	5.36	18.906	25.716	34.189	42.297	0.046	0.0	-29.23	-1.519	-505.58	4.455	19.9
30	18.639	35.862	5.33	18.634	25.775	34.257	42.373	0.068	0.1	-4.95	-0.297	-82.64	1.801	29.8
40	18.497	35.854	5.34	18.490	25.805	34.292	42.412	0.090	0.2	-10.26	-0.030	-206.47	2.847	39.8
50	18.385	35.854	5.32	18.376	25.834	34.324	42.448	0.112	0.3	-12.69	0.311	-275.72	3.290	49.7
100	16.097	35.688	5.47	16.081	26.259	34.828	43.026	0.212	1.0	-42.78	-4.555	-517.07	4.505	99.4
125	15.082	35.561	5.43	15.063	26.391	34.997	43.230	0.255	1.5	-26.52	-3.419	-294.74	3.401	124.3
150	14.904	35.537	5.50	14.881	26.413	35.026	43.265	0.297	2.1	-6.57	-0.830	-64.52	1.591	149.1
200	14.293	35.449	5.54	14.264	26.479	35.115	43.376	0.378	3.6	-14.29	-2.062	-121.75	2.186	198.8
250	13.307	35.292	5.40	13.272	26.565	35.240	43.538	0.457	5.4	-22.30	-3.599	-149.12	2.419	248.4
300	11.563	35.000	5.44	11.524	26.680	35.428	43.793	0.532	7.5	-40.48	-6.377	-229.30	3.000	298.0
350	10.166	34.795	5.36	10.125	26.771	35.579	44.001	0.601	9.8	-14.66	-1.870	-95.53	1.936	347.6
400	9.542	34.709	5.49	9.497	26.810	35.646	44.094	0.667	12.3	-12.64	-1.816	-63.71	1.581	397.2
450	9.184	34.667	5.39	9.134	26.836	35.688	44.152	0.733	15.1	-7.52	-0.883	-48.20	1.375	446.8
500	8.853	34.625	5.47	8.799	26.857	35.725	44.203	0.797	18.3	-8.21	-0.980	-49.65	1.396	496.4
600	7.756	34.525	4.92	7.695	26.946	35.865	44.391	0.923	25.3	-14.72	-0.994	-125.35	2.218	595.5
700	6.291	34.443	4.54	6.227	27.084	36.072	44.663	1.037	32.8	-12.67	-0.627	-108.88	2.067	694.5
800	5.022	34.395	4.47	4.956	27.200	36.252	44.902	1.138	40.6	-11.08	-0.236	-104.93	2.029	793.5
900	4.310	34.410	4.23	4.241	27.292	36.379	45.063	1.229	48.4	-3.60	0.553	-72.12	1.682	892.4
1000	4.086	34.462	3.78	4.010	27.358	36.456	45.150	1.312	56.5	-2.12	0.369	-45.31	1.334	991.3
1069	3.958	34.487	3.64	3.877	27.391	36.496	45.196	1.366	62.2	-2.11	0.352	-45.31	0.000	1059.5

BOTL NO.	PRES DBAR	CTDMP IPT568	THETA IPT568	SIG-TH KG/M3	SIG-2 KG/M3	SIG-4 KG/M3	CTDSAL PSS78	SALNTY PSS78	OXYGEN ML/L	SILCAT UMOL/L	PHSPHT UMOL/L	NITRAT UMOL/L	NITRIT UMOL/L	CFC-11 PM/KG	CFC-12 PM/KG	DEPTH METERS	QUALT1
12	2.5	19.145	19.145	24.593	33.076	41.193	34.487	35.880	5.40	2.05	0.14	0.00	0.00	2.024	1.124	2	22222222
11	101.8	16.198	16.182	26.234	34.799	42.993	35.685	35.696	5.53	1.89	0.22	0.30	0.00	2.235	1.201	100	22222222
10	203.3	14.265	14.235	26.482	35.120	43.381	35.445	35.446	5.51	1.57	0.39	3.00	0.00	2.499	1.317	201	22222222
9	301.8	11.305	11.267	26.723	35.481	43.856	34.994	34.969	5.54	2.40	0.83	10.10	0.00	2.663	1.367	299	22222222
8	402.4	9.497	9.452	26.813	35.652	44.101	34.704	34.704	5.51	4.25	1.19	16.30	0.00	2.398	1.233	398	22222222
7	502.6	8.697	8.643	26.880	35.755	44.239	34.623	34.608	5.45	6.09	1.35	19.10	0.00	2.028	1.053	498	22222222
6	600.1	7.771	7.710	26.944	35.862	44.387	34.525	34.524	4.93	11.60	1.64	23.60	0.00	1.127	0.592	594	22222222
5	698.9	6.219	6.156	27.094	36.086	44.680	34.444	34.437	4.59	21.77	1.96	28.50	0.00	0.510	0.278	692	22222222
4	800.3	4.966	4.901	27.206	36.261	44.913	34.394	34.394	4.47	32.96	2.18	31.60	0.00	0.286	0.167	792	22222222
3	899.7	4.300	4.230	27.293	36.381	45.065	34.410	34.413	4.16	45.98	2.36	33.70	0.00	0.153	0.083	890	22222222
2	998.5	4.074	3.998	27.359	36.458	45.152	34.462	34.473	3.76	59.33	2.49	35.10	0.00	0.051	0.045	988	22222222
1	1064.8	3.957	3.876	27.389	36.495	45.195	34.485	34.482	3.59	64.05	2.54	35.60	0.00	0.035	0.022	1053	22222222

CRUISE: CD 29 STA: 106 DATE (D/M/Y): 16-12-87 TIME: 0049 LAT: 34 10.22 S LONG: 114 24.64 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81913E-04 1/S SOUND SPEED= 1502.2 M/S Depth= 700 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.421	35.853	4.76	19.421	25.566	34.023	42.117	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.421	35.853	4.76	19.420	25.566	34.023	42.117	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.383	35.858	5.20	19.379	25.581	34.039	42.134	0.048	0.0	-10.21	0.451	-240.46	3.073	19.9
30	19.098	35.869	5.51	19.092	25.663	34.130	42.233	0.072	0.1	-89.19	0.026	-1885.37	8.604	29.8
40	18.432	35.858	5.20	18.425	25.824	34.313	42.435	0.094	0.2	-38.58	-2.153	-647.63	5.043	39.8
50	18.166	35.848	5.47	18.157	25.884	34.381	42.512	0.116	0.3	-15.43	-0.153	-300.09	3.432	49.7
100	16.990	35.769	5.08	16.974	26.112	34.649	42.817	0.215	1.0	-2.78	0.015	-54.61	1.464	99.4
125	16.923	35.774	5.18	16.903	26.133	34.672	42.842	0.263	1.6	-4.18	-0.202	-70.29	1.661	124.3
150	16.796	35.760	5.08	16.771	26.153	34.697	42.871	0.311	2.3	-6.19	-0.524	-92.82	1.909	149.1
200	16.467	35.734	5.25	16.434	26.212	34.768	42.954	0.406	4.0	-17.27	-1.785	-217.15	2.920	198.8
250	14.624	35.487	5.44	14.586	26.439	35.063	43.312	0.495	6.0	-37.25	-5.379	-333.34	3.618	248.4
300	12.955	35.226	5.41	12.913	26.586	35.277	43.588	0.575	8.2	-72.30	-11.567	-457.66	4.239	298.1
350	10.123	34.790	5.39	10.081	26.775	35.585	44.009	0.645	10.6	-26.12	-3.756	-144.72	2.384	347.7
400	9.526	34.711	5.40	9.480	26.814	35.651	44.099	0.711	13.1	-8.63	-1.006	-57.43	1.502	397.3
450	9.119	34.664	5.34	9.070	26.844	35.700	44.165	0.776	15.9	-10.14	-1.253	-60.15	1.537	446.9
500	8.719	34.614	5.30	8.665	26.869	35.743	44.227	0.840	19.0	-8.59	-1.008	-51.84	1.427	496.4
600	7.283	34.497	4.66	7.224	26.992	35.933	44.479	0.963	25.9	-18.78	-1.119	-161.12	2.515	595.5
685	6.141	34.440	4.56	6.080	27.100	36.096	44.693	1.056	32.0	-6.84	-0.317	-161.12	0.000	679.7

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
8	3.5	19.396	19.395	25.575	34.033	42.127	35.856	35.855	5.31	2.33	0.12	0.00	0.00	2.016	1.153	3	22222222
7	104.1	16.974	16.957	26.116	34.654	42.822	35.769	35.769	5.15	2.17	0.28	1.50	0.00	2.143	1.229	103	22222222
6	202.3	16.458	16.425	26.210	34.766	42.952	35.728	35.734	5.25	2.00	0.31	1.50	0.00	2.279	1.232	200	22222222
5	304.1	12.430	12.407	26.594	35.306	43.638	35.102		5.50	2.00	0.59	6.50	0.00	2.482	1.373	301	25222222
4	403.1	9.588	9.542	26.801	35.635	44.081	34.707	34.718	5.53	4.34	1.18	16.30	0.00	2.405	1.279	4	22222222
3	500.2	8.712	8.658	26.869	35.743	44.227	34.612	34.618	5.40	6.34	1.41	19.70	0.00	1.957	1.044	3	22222222
2	602.6	7.257	7.199	26.994	35.936	44.484	34.496	34.510	4.77	14.85	1.81	26.00	0.00	0.875	0.445	597	22222222
1	687.6	6.122	6.061	27.103	36.099	44.698	34.440	34.437	4.55	23.19	2.00	29.40	0.00	0.479	0.280	681	22222222

CRUISE: CD 29 STA: 107 DATE (D/M/Y): 16-12-87 TIME: 0220 LAT: 34 9.71 S LONG: 114 30.26 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81895E-04 1/S SOUND SPEED= 1518.2 M/S Depth= 160 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.530	35.849	5.00	19.530	25.535	33.989	42.079	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.530	35.849	5.00	19.530	25.535	33.989	42.079	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	19.414	35.849	5.44	19.410	25.566	34.023	42.117	0.048	0.0	-3.32	0.085	-74.44	1.710	19.9
30	19.251	35.852	5.44	19.246	25.610	34.073	42.171	0.073	0.1	-59.06	1.436	-1311.57	7.177	29.8
40	18.743	35.849	5.43	18.736	25.739	34.218	42.331	0.096	0.2	-13.20	-0.548	-236.30	3.046	39.8
50	18.602	35.852	5.50	18.594	25.777	34.260	42.378	0.118	0.3	-23.56	-0.332	-458.75	4.244	49.7
100	17.142	35.784	5.03	17.125	26.087	34.619	42.782	0.223	1.1	-14.10	-0.888	-221.14	2.947	99.4
125	17.100	35.786	5.01	17.080	26.099	34.633	42.797	0.271	1.6	-0.53	-0.036	-8.39	0.574	124.3
141	17.098	35.786	4.97	17.074	26.101	34.634	42.799	0.302	2.1	-0.25	0.029	-8.39	0.000	140.2

BOTL	PRES	CTD	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
4	2.5	19.531	19.530	25.485	33.940	42.031	35.785	35.853	5.30	2.30	0.11	0.10	0.00	0.000	1.108	2	22222222
3	53.4	18.503	18.493	25.800	34.287	42.407	35.849	35.845	5.40	2.30	0.12	0.10	0.00	2.020	1.136	52	22222222
2	104.8	17.129	17.112	26.090	34.623	42.786	35.784	35.782	5.17	2.30	0.26	1.20	0.00	2.129	1.192	103	22222222
1	143.0	17.100	17.076	26.100	34.633	42.798	35.785	35.783	5.14	2.20	0.25	1.20	0.00	2.115	1.181	141	22222222

CRUISE: CD 29 STA: 108 DATE (D/M/Y): 16-12-87 TIME: 0353 LAT: 34 10.27 S LONG: 114 44.85 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81915E-04 1/S SOUND SPEED= 1519.6 M/S Depth= 130 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	19.133	35.862	5.42	19.133	25.647	34.113	42.215	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	19.133	35.862	5.42	19.133	25.647	34.113	42.215	0.002	0.0	-0.36	0.000	0.00	0.000	1.0
20	18.974	35.861	5.42	18.971	25.688	34.159	42.266	0.046	0.0	-2.63	0.060	-106.95	2.049	19.9
30	18.949	35.868	5.30	18.944	25.700	34.172	42.279	0.069	0.1	-3.06	0.549	-96.80	1.949	29.8
40	18.905	35.873	5.37	18.898	25.716	34.190	42.298	0.092	0.2	-3.00	0.296	-79.78	1.770	39.8
50	18.887	35.875	5.38	18.878	25.722	34.196	42.305	0.115	0.3	-1.72	-0.037	-33.04	1.139	49.7
100	18.168	35.833	5.34	18.151	25.874	34.371	42.502	0.225	1.1	-2.92	-0.070	-33.04	0.000	99.4
111	18.164	35.833	5.31	18.145	25.875	34.373	42.504	0.249	1.4	-0.55	-0.005	-33.04	0.000	110.4

BOTL	PRES	CTDMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
3	2.9	19.073	19.073	25.641	34.109	42.212	35.833	35.869	5.39	2.09	0.15	0.00	0.00			2	22222255
2	53.6	18.858	18.849	25.729	34.204	42.314	35.874	35.876	5.3	2.10	0.16	0.00	0.00			53	22222255
1	115.2	18.154	18.134	25.878	34.376	42.508	35.833	35.838	5.21	2.27	0.23	0.60	0.00			114	22222255

CRUISE: CD 29 STA: 109 DATE (D/M/Y): 16-12-87 TIME: 0438 LAT: 34 9.52 S LONG: 114 49.64 E

GRAVITY= 9.7966 M/S CORIOLIS= -.81888E-04 1/S SOUND SPEED= 1518.7 M/S Depth= 55 Cor Meters

PRES	TMP	SALT	OXYG	PTMP	SIG-TH	SIG-2	SIG-4	DYN-HT	PE	GRD-PT	GRD-S	POT-V	B-V	DEPTH
DBAR	IPTS68	PSS78	ML/L	IPTS68	KG/M3	KG/M3	KG/M3	DYNAMIC	J/M2	C/DB	1/DB	(m s)-1	CPH	METERS
								METERS	10-5	10-3	10-3	10-12		
0	18.802	35.867	5.55	18.802	25.736	34.212	42.323	0.000	0.0	-0.18	0.000	0.00	0.000	0.0
1	18.802	35.867	5.55	18.802	25.736	34.212	42.324	0.002	0.0	-0.35	0.000	0.00	0.000	1.0
20	18.515	35.857	5.29	18.511	25.802	34.288	42.408	0.044	0.0	-12.39	-1.185	-178.13	2.645	19.9
30	18.427	35.849	5.10	18.422	25.818	34.307	42.430	0.066	0.1	-4.61	-0.225	-79.43	1.766	29.8
40	18.390	35.847	5.19	18.383	25.827	34.317	42.441	0.088	0.2	-1.27	-0.053	-79.43	0.000	39.8

BOTL	PRES	CTDMP	THETA	SIG-TH	SIG-2	SIG-4	CTDSAL	SALNTY	OXYGEN	SILCAT	PHSPHT	NITRAT	NITRIT	CFC-11	CFC-12	DEPTH	QUALT1
NO.	DBAR	IPTS68	IPTS68	KG/M3	KG/M3	KG/M3	PSS78	PSS78	ML/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	PM/KG	PM/KG	METERS	
-9	2.9	19.073	19.073	25.651	34.119	42.223	35.847	0.000	5.39	2.09	0.15	0.00	0.00			2	22222255
2	12.7	18.572	18.570	25.793	34.276	42.394	35.864	35.861	5.42	1.74	0.16	0.10	0.00			12	22222255
1	44.8	18.387	18.379	25.827	34.318	42.442	35.847	35.844	5.13	1.75	0.21	0.90	0.00			44	22222255

Appendix C: Tritium, Helium, and Neon Observations

INDIAN OCEAN 32S ST12

DEPTH db	T pot. deg C	SALINITY permil	DELTA He3 %	He ccSTP/g	DELTA He %	Ne ccSTP/g	DELTA Ne %	TRITIUM TU	T-He3 AGE years
8.8	20.830								
200	17.022	35.631	0.00	3.85	1.9	13.41	4.5	0.640	4.7
598	11.596	35.021						0.338	
949	7.007	34.558						0.016	
1148	4.756	34.465	2.60	4.10	3.5	17.87	4.8		57.0
1400	3.799	34.591						-0.003	
1800	2.795	34.700	5.80	4.15	4.1	17.55	3.8	0.000	
2202	2.417	34.774	6.50	4.28	5.9	18.48	5.5		
2400	2.308	34.792		4.28	7.1	18.62	6.2		

IND OCEAN 32 S ST 15 32 32.7S 33 24E ST 15

DEPTH db	T pot. deg C	SALINITY permil	DELTA He3 %	He ccSTP/g	DELTA He %	Ne ccSTP/g	DELTA Ne %	TRITIUM TU	T-He3 age (years)
100	17.873	35.662	-0.7	3.82	1.2	15.83	2.6	0.910	2.1
200	17.048		-0.5	3.78	3.4	15.63	3.8	0.861	1.3
601	12.606	35.149					0.4	0.420	
901	8.893		6.2	4.16	4.4	18.38	5.1		
1502	3.652	34.546	7.8	4.46	12.0	19.11	10.3		
1804	3.158	34.668							
2001	2.780	34.708	6.2	4.18	4.7	18.45	5.7		
3525	1.142	34.760	7.9	4.14	3.0	18.27	3.2		

INDIAN OCEAN 32S 33 03S, 41 00E ST 26

DEPTH db	T pot. deg C	SALINITY permil	DELTA He3 %	He ccSTP/g	DELTA He %	Ne ccSTP/g	DELTA Ne %	TRITIUM TU	T-He3 AGE years
6.8	19.172	35.706	-1.8	3.75	-0.2	15.79	2.7	0.685	-0.6
100	17.116	35.636	-1.3	3.95	4.2	16.01	3.0	0.793	0.5
200	15.939	35.529	-0.5	3.95	3.7	16.42	4.9	0.840	4.9
300	14.800	35.428	1.0	4.02	5.1	16.37	3.8	0.710	3.5
450	13.228	35.241	2.1	4.04	4.9	16.91	6.3	0.547	5.9
600	11.639	35.021	4.8	4.07	5.0	16.90	4.8	0.440	10.8
800	9.178	34.722	6.3	4.00	2.2	17.15	4.1		
1000	6.225	34.474	6.4	4.11	3.8	17.63	4.2	0.178	
1200	4.278	34.412	5.7	4.19	5.4	18.04	4.7		
1500	3.244	34.553	7.3	4.15	4.0	18.19	4.6		
1800	2.751							0.297	
2100	2.487	34.747						0.123	
2400	2.316	34.793	6.0	4.35	8.8	18.50	5.5		
3300	1.740	34.797						0.005	
4500	0.375	34.705						0.025	
4900	0.229	34.695	5.8	4.41	10.3	18.60	5.9		
5088	0.192	34.691						0.003	

INDIAN OCEAN 32S ST 33 33 22.7S ,46 54E ST 33

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	He ccSTP/g	DELTA He ‰	Ne ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
0	19.068	35.577		3.77	0.2	15.56	1.1	0.711	0.1
54	17.338	35.580	-1.6	3.95	2.8	16.21	4.4	0.792	0.1
150	15.35	35.496	-1.1	3.98	4.3	16.54	3.6		0.8
350	13.396	35.276	-0.7	3.99	3.7	16.52	4.2	0.644	1.5
450	12.538	35.142	-1.2	4.01	3.9	16.87	5.3	0.402	1.2
850	7.604	34.717	4.3	4.12	4.7	17.72	5.5		
1500	2.927	34.525	8.2	4.14	3.8	18.15	4.0		
2100	2.287	34.724		4.20	5.2	18.31	4.3		
2503	2.052	34.784	14.8	4.31	7.8	18.88	7.1		
2701	1.819	34.784		4.33	8.3				
3090	1.428	34.756	12.2	4.33	8.1	18.84	6.4		

INDIAN OCEAN 32S ST35 33 33.6S, 48 14E ST35

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	He ccSTP/g	DELTA He ‰	Ne ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
0	19.594	35.532	-1.2	3.85	2.7	16.02	4.3	0.756	0.7
100	15.849	35.539	-2.0	3.87	1.8	16.12	2.9	0.680	-0.4
200	14.884	35.444	0.4	3.84	3.5	16.57	5.2		2.8
300	13.818	35.323	0.4	3.95	3.1	16.33	2.9	0.805	2.4
400	12.936	35.211	0.8	4.02	4.4	16.75	4.9	0.464	4.7
600	10.804	34.919	0.0	4.06	4.5	16.92	4.2	0.409	3.8
1000	5.341	34.461	2.8	4.14	4.3	17.90	5.0		10.9
1200	3.901	34.451	3.2	4.13	3.8	18.02	4.1	0.288	12.0
1400	3.169	34.489	5.2	4.12	3.2	18.09	3.9		
1700	2.608	34.615	6.8	4.18	4.7	18.30	4.6	0.195	
2400	2.004	34.739	16.9	4.30	7.6	18.53	5.3		
2800	1.667	34.749	14.9	4.33	8.2	18.67	5.7		
3200	1.227	34.731	9.6	4.34	8.2	18.88	6.4		
3205	1.227	34.731	10.8	4.36	8.8	18.97	6.9		
3782	0.842	34.721	6.8	4.29	6.8	18.78	5.4	0.000	
4029	0.756	34.713	6.8	4.46	11.3			0.017	

INDIAN OCEAN 32S ST39 33 59.9S, 52 44E ST39

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	He ccSTP/g	DELTA He ‰	Ne ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
10.1	19.350	35.625	-1.8	3.88	3.3	16.00	4.1	0.794	-0.1
200	15.488	35.507	-1.5	3.87	1.6	16.42	2.9	0.692	0.3
300	14.442	35.404	-1.6	3.97	3.6	16.45	4.1	0.707	0.1
500	12.676	35.172	5.1	4.00	3.7	16.45	2.8		
700	10.373	34.867	4.8	4.04	3.9	16.70	2.5	0.577	8.8
900	7.499	34.569	5.0	4.05	3.0	17.43	4.3		
1300	3.839		6.8	4.09	2.8	18.16	3.9		
1500	3.174	34.482	7.9	4.14	4.0	18.18	4.4	0.144	
1903	2.479	34.646	5.1	4.22	5.6	18.47	5.4	0.178	
2801	1.640	34.742	7.8	4.31	7.8	18.17	4.9		
3400	1.104	34.725	7.1	4.38	9.2	18.78	5.7	0.032	
4001	0.840	34.716	5.6	4.43	10.3	19.30	8.3		
4201	0.802	34.713	5.4	4.34	8.1	18.83	5.6	0.044	
4402	0.773		4.8	4.27	6.4	18.58	4.2		

INDIAN OCEAN

32S ST44

33 58.3S, 57 02E

ST44

DEPTH db	T pot deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
250	14.336	35.398	-0.3	3.90	1.8	15.96	0.9	0.758	1.8
400	13.333	35.276	0.3	3.95	2.7	16.53	3.8	0.742	2.5
500	12.289	35.104	1.6	4.02	4.0	16.78	4.5	0.705	4.2
600	11.308	34.969	1.2	4.00	3.3	16.51	2.1		4.3
800	8.717	34.675	1.8	4.09	4.4	17.18	3.9		5.9
1000	5.918	34.457	1.7	4.16	5.0	17.76	4.7	0.377	7.3
1200	4.350	34.401	3.4	4.07	2.2	17.67	2.6	0.033	40.0
1400	3.399		5.8	4.14	3.9	18.26	5.1	0.177	
1600	2.978	34.525	6.6	4.16	4.3			0.000	
2000	2.355	34.670	6.1	4.19	4.8	18.40	4.9	0.099	
2600	1.908	34.734	6.8	4.26	6.6	18.55	5.3	0.129	
3200	1.333	34.733	7.7	4.31	7.6	18.61	5.0	0.328	
3800	0.533	34.705	6.9	4.33	7.9	19.05	4.8	0.105	
4099	0.465	34.703	6.0	4.37	8.7	18.89	5.6	0.019	56.3
4401	0.376	34.700						0.004	
4741	0.289	34.693	4.7	4.27	6.3	18.78	4.7	0.510	9.8
5103	0.210	34.690	6.0	4.40	9.4	19.09	6.4	0.393	13.2
5197	0.206	34.691		4.43	10.2	19.18	6.8	0.000	
5197	0.209	34.691		4.37	8.7	19.01	5.9		

INDIAN OCEAN

32S ST50 '33 59.3S, 61 59E

ST 50

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
3.2	19.015	35.550	-1.6	3.85	2.4	16.23	5.3	0.898	0.1
200	14.193	35.400	-1.2	3.87	1.1	16.28	2.9	0.774	0.6
300	13.867	35.344	-0.8	4.00	4.3	16.62	4.8	0.481	1.8
600	11.328	34.962	1.8	4.07	5.0	16.89	4.4	0.412	7.0
800	8.718	34.671	2.1	4.11	4.9	17.29	4.6		
1100	4.629	34.372	3.0	4.20	5.8	18.09	5.3	0.040	
1200	3.946	34.368						0.103	
1400	3.183	34.454	6.4	4.09	2.5	18.13	4.1		
2400	1.904	34.726	8.9	4.25	6.3	18.80	6.7		
3000	1.514	34.737	8.8	4.37	9.2	18.75	6.0		
3300	1.352	34.726	7.2	4.30	7.4	18.04	1.8	0.034	
3600	1.070	34.725						0.028	
3900	0.708	34.709	6.6	4.28	6.6	18.76	5.1	0.157	25.0
4200	0.463	34.700	5.8	4.29	6.9	18.60	3.9	0.111	28.0
4500	0.285	34.692						0.010	
4800	0.159		5.6	4.30	7.2	19.09	6.3	0.000	
5187	0.096	34.686	5.9	4.25	5.7	18.69	3.9		

INDIAN OCEAN

32S ST55

34 01S, 71 59E

ST55

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
1.5	17.815	35.416	-1.4	3.86	2.0	16.03	3.4	0.624	0.5
70	15.823	35.437	-1.3	3.88	2.4	16.24	3.6	0.926	0.4
150	13.390	35.262	-1.5	4.00	4.1	16.61	4.3	0.809	0.2
250	12.689	35.224	-2.1	3.97	3.2	16.32	2.0	0.541	-0.1
350	12.102	35.077		4.00	3.6	16.73	4.1	0.333	
450	11.501	34.982	-1.2	3.78	5.3	17.04	5.5		2.4
550	10.653	34.863		4.07	4.7	17.25	6.1		
700	8.920	34.678	1.2	4.10	4.8	17.31	4.9	0.210	10.3
900	6.102	34.444	1.8	4.08	3.2	17.39	2.7		
1300	3.238	34.438	3.8	4.26	6.8	18.33	5.3		
1500	2.789	34.529	7.7	4.20	5.0	18.55	6.2		
2200	1.917	34.726	14.7	4.22	5.4	18.50	5.1		
3500	1.135	34.716	10.3	4.20	4.8	18.72	5.4		
4100	0.771	34.708	7.2	4.31	7.4	18.82	5.5	0.169	24.5
4700	0.672	34.705	7.1	4.29	6.9	18.72	4.8		
5055	0.668	34.705	5.6	4.19	4.3	18.44	3.3		

INDIAN OCEAN

32S ST62

30 22.4S, 79 15E

ST62

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
22	18.897	35.772	-1.4	3.95	5.0	16.13	4.8	0.636	0.5
100	16.265	35.622	3.1	3.88	2.1	16.24	4.0	0.762	5.4
200	13.646	35.335	5.3	3.98	3.8	16.27	2.4	0.645	8.5
300	12.301	35.121	5.7	4.06	5.2	16.45	2.5	0.608	9.3
400	11.377	34.975	8.7	4.06	4.7	16.86	4.4	0.741	10.4
500	10.666	34.875	6.6	4.00	3.0	16.45	1.2	0.603	10.2
700	9.183	34.686	8.8	3.99	2.1	17.59	6.8		
800	8.235		9.8	4.19	6.8	17.30	4.2		
1000	5.294	34.410	9.4	4.14	4.5	17.65	3.5		
1100	4.332	34.408	7.2	4.19	5.3	17.60	2.3		
1300	3.583	34.493	11.1	4.27	7.4	17.78	2.5		
1500	3.169	34.572	9.0	4.20	5.4	18.02	3.5		
2300	2.017	34.729	14.9	4.53	13.2	18.72	6.4		
2700	1.576	34.742	10.9	4.42	10.3	18.69	5.7		
2900	1.400	34.735	8.2	4.46	11.4	19.04	7.5		
3100	1.258	34.732	6.4	4.20	4.9	18.68	5.3		
3500	1.137	34.726	5.0	4.25	6.0	18.25	2.8		
3792	1.121	34.726	5.5	4.32	7.8	18.83	6.0		

INDIAN OCEAN

32S ST65

29 02S, 82E

ST65

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
17	19.482	35.917	-1.2	3.84	2.5	15.93	3.8	0.706	0.7
100	16.089	35.593	3.8	3.87	1.9	15.97	2.3	0.707	6.5
200	13.485	35.283	4.8	4.10	6.8	16.74	5.2	0.679	7.7
301	12.229	35.102	5.5	4.04	5.1			0.782	7.5
400	11.340	34.971	9.4	4.06	4.7	16.77	3.8	0.767	10.6
500	10.539	34.863	6.9	4.09	5.0	16.98	4.3	0.767	8.7
700	8.752	34.651	8.1	4.18	6.6	17.37	5.1		
1001	4.696	34.411	7.0	4.24	6.8	18.09	5.5		
1100	4.110	34.418	6.6	4.21	5.9	18.32	5.8		
1200	3.716	34.477	10.3	4.31	8.2	18.40	6.2		
2000	2.290	34.708	12.4	4.31	7.8	18.56	5.8		
2500	1.737	34.732	11.9	4.28	7.0	18.65	5.7		
3100	1.263	34.735	7.0	4.31	7.6	18.86	6.0		
4000	1.057	34.722	6.8	4.25	5.9	18.72	5.3		
4167	1.049	0	5.9	4.17	4.0	18.65	4.9		

INDIAN OCEAN

32S ST69

29 32.1S, 86 55E

ST69

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
2.6	21.593	36.528	-1.5	3.74	0.9	15.59	2.9	0.599	0.3
100	18.010	35.853	-0.9	3.91	3.6	15.91	3.0	0.635	1.2
200	14.776	35.492	0.6	4.00	4.5	16.50	4.8	0.712	3.0
300	12.632	35.177		4.04	7.4	16.82	5.1	0.652	
400	11.408	34.989	1.8	4.02	3.9	16.84	4.2	0.783	4.0
500	10.519	34.865	0.9	4.04	4.0	17.06	4.8		4.6
600	9.746	34.765	4.3	4.07	4.3	17.10	4.4	0.406	10.8
700	8.971	34.665	5.8	4.09	4.5	17.37	5.2	0.000	
800	7.894	34.567	7.9	4.11	5.0	17.36	4.3		
900	6.339	34.461	9.5	4.13	4.8	17.82	5.5	0.080	
1000	4.808	34.403	9.3	4.24	6.8	18.13	5.8	0.040	
1100	4.238	34.464	10.2	4.14	4.1	17.76	3.1		
1300	3.463	34.529	9.8	4.27	7.2	18.05	3.9	0.058	
1700	2.702	34.653	10.9	4.27	6.9	18.49	5.8	0.340	
2300	1.940	34.724	11.2	4.30	7.5	18.67	6.0	0.086	
2700	1.575	34.730	13.7	4.31	7.8	18.79	6.3		
3300	1.197	34.724	12.0	4.29	7.0	18.85	6.2		
3585	1.069	34.721	11.5	4.33	8.0	18.92	6.6		

INDIAN OCEAN

32S ST80

31 59.8S, 99E

ST80

DEPTH db	T pot. deg. C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
8.4	18.875	35.984	-1.7	3.88	3.3	15.91	3.5	0.674	-0.3
60	17.503	35.961	-1.7	3.85	2.1	16.04	3.6	0.649	-0.3
120	16.482	35.874	-1.1	3.99	5.2	15.99	2.7	0.754	0.8
200	15.846	35.759	-0.3	3.94	4.0	16.51	5.6	0.793	1.7
300	13.651	35.391	4.8	4.09	6.7	16.23	2.2	0.529	9.4
400	11.856	35.089						0.502	
500	10.648	34.871	6.3	4.10	5.4	16.85	3.6	0.345	14.9
700	9.040	34.653	6.3	4.18	6.9	17.43	5.7		
800	8.539	34.595	6.5	4.19	6.6	17.28	4.3		
901	7.324	34.509	6.6	4.14	5.1	17.51	4.6		
1000	5.582	34.415	5.8	4.15	4.8	17.73	4.1		
1198	3.873	34.421						0.000	
1600	2.945	34.584	6.8	4.34	8.8	18.28	4.8	0.401	14.0
1800	2.649	34.645							
1950	2.482	34.674	5.1	4.24	6.1	18.72	6.9		
2104	2.241	34.704	6.9	4.16	4.1	18.35	4.5		

INDIAN OCEAN

32S ST88

32 44.8S 103.24E

ST88

DEPTH db	T pot. deg. C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
9.8	17.530	35.709	-1.4	3.85	1.9	16.05	3.6	0.718	0.4
102	14.208	35.474	-0.4	3.94	2.9	16.36	3.4	0.846	1.5
200	12.434	35.158	1.8	4.08	5.8	16.81	4.9	0.851	3.7
300	10.983	34.923	4.2	4.02	3.6	16.89	4.1		
400	10.352	34.825	7.2	4.17	7.0	17.41	6.8		
500	9.631	34.726	9.7	4.17	6.8	17.37	5.9	0.409	
700	8.323	34.594	8.6	4.11	4.8	17.36	4.7		
898	5.600	34.404	9.3	4.17	5.3	17.83	4.8	0.000	
1100	3.912	34.403	9.6	4.31	8.4	18.26	5.6	0.009	
1300	3.364	34.512	10.1	4.28	7.4	18.21	4.9	0.000	
1500	3.025	34.581							
1797	2.609	34.662	9.6	4.31	7.9	18.52	5.9	0.212	
2101	2.229	34.703							
2401	1.929	34.730	8.4	4.41	10.3	18.87	7.1	0.076	
2703	1.653	34.736							
3000	1.413	34.737	10.0	4.35	8.5	18.83	6.4		
3300	1.131	34.729							
3600	0.929	34.721	8.5	4.38	9.2	18.82	5.7		
3906	0.761	34.717	8.5	4.41	9.9	19.02	6.7	0.009	
4208	0.661	34.711							
4501	0.606	34.707	7.9	4.28	6.7	18.56	4.1		
4806	0.573	34.705							
5102	0.550	34.705	7.5	4.31	7.4	18.81	5.2		
5336	0.539	34.700	8.2	4.35	8.2	19.12	6.9	0.242	21.3

INDIAN OCEAN

32S ST94

33 53.6S, 107 13E

ST94

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
13.4	17.901	35.893	-1.6	3.87	2.8	16.02	3.9	0.649	0.2
100	15.703	35.700	0.0	3.86	1.6	16.17	3.3	0.806	2.0
200	13.466	35.350	2.1	4.01	3.3	16.77	4.2	0.682	4.9
300	11.210	34.963	0.8	4.12	6.4	17.10	5.6	0.060	21.5
400	9.983	34.771	3.7	4.08	4.8	17.14	4.8		
500	9.347	34.686	4.9	4.11	5.2	17.10	4.0		
600	8.687	34.611	7.8	4.18	6.7	17.35	4.9		
700	8.001	34.552	8.4	4.17	6.1	17.52	5.3		
800	6.610	34.464	8.1	4.21	6.6	17.78	5.5		
900	5.147	34.396	7.9	4.22	7.4	18.15	6.2		
1000	4.269	34.396	8.8	4.28	7.7	18.06	4.8		
1200	3.509	34.482	7.6	4.38	9.8	18.55	6.9		
1800	2.475	34.665	7.9	4.21	5.4	18.27	4.3		
2600	1.752	34.728	8.8	4.32	8.1	18.67	5.8		
3400	1.220	34.731	15.0	4.24	5.9	18.86	6.3		
4200	0.817	34.715	6.4	4.29	6.9	18.66	4.7		
4900	0.558	34.705	10.9	4.27	6.3	18.58	3.9		
5375	0.507	34.707	8.6	4.31	7.2	18.86	5.4		

INDIAN OCEAN

32S ST97

34 10S, 109 09E

ST97

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
100	14.903	35.595	-1.0	3.95	3.6	16.40	4.2		
200	13.782	35.394	-0.8	3.94	2.8	16.47	3.8		
300	12.067	35.092	-1.2	4.05	4.9	16.64	3.5		
400	10.084	34.770	-1.6	4.05	3.9	17.10	4.6	0.313	0.3
500	9.479	34.697	0.2	4.15	6.1	17.19	4.7		
600	8.918	34.638	2.3	4.15	6.0	17.43	5.5		
700	8.302	34.563	6.3	4.13	5.5	17.39	4.8		
800	7.186	34.488	7.1	4.23	7.4	17.43	4.0		
900	5.766	0.000	9.1	4.27	7.8	18.01	6.1		
1000	4.508	34.370	10.8	4.30	8.3	18.30	6.4		
1300	3.284	0.000	11.4	4.23	6.2	18.32	5.3	0.055	
1900	2.400	34.677	11.8	4.26	6.7	18.39	4.9		
2500	1.844	34.727	12.4	4.29	7.3	18.54	5.2		
3100	1.453	34.732	12.1	4.23	5.8	18.58	5.0		
3800	1.020	34.725	11.4	4.33	7.9	18.63	4.7		
4000	0.898	34.716	10.5	4.35	8.4	18.92	6.2		
5138	0.515	34.702	9.7	4.27	6.2	18.89	5.6		

INDIAN OCEAN

325 ST105

ST105

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
2.5	19.145	35.880	-1.8	3.80	1.1	15.65	1.9		
100	16.182	35.696	-1.1	4.09	7.9	16.64	6.6		
200	14.235	35.446	-0.2	4.02	5.1	16.48	4.2		
400	9.452	34.704		4.06	3.9	17.15	4.4		
500	8.643	34.608	-0.6	4.07	4.0	17.17	3.8		
600	7.711	34.524	2.1	4.12	4.8	17.35	4.0		
700	6.156	34.437		4.13	4.4	17.83	5.3		
800	4.902	34.394	8.2	4.13	4.1	17.68	3.3		
900	4.231	34.413	10.4	4.21	5.8	17.74	2.9		
1000	3.999	34.473	10.8	4.12	3.6	17.95	3.9		
1080	3.877	34.482	11.1	4.12	3.6	17.94	3.8		

INDIAN OCEAN

325 ST106

ST 106

DEPTH db	T pot. deg.C	SALINITY permil	DELTA He3 ‰	HELIUM ccSTP/g	DELTA He ‰	NEON ccSTP/g	DELTA Ne ‰	TRITIUM TU	T-He3 AGE years
3.5	19.395	35.855	-1.5	3.86	3.1	15.78	2.8	0.698	0.3
100	16.957	35.769	-0.9	4.10	8.3	16.47	5.9	0.477	1.6
200	16.425	35.734	0.0	4.00	5.4	16.29	4.5	0.341	4.4
300	12.389			4.01	4.2	16.90	4.5		
400	9.542	34.718		4.08	4.6	17.03	3.8		
500	8.659	34.618	0.5	4.12	5.1	17.26	4.3		
600	7.199	34.510	2.5	4.11	4.5	17.41	3.9		
687	6.062	34.437	6.9	4.15	4.9	17.79	5.0		

Precision	+	-	0.2	0.04	1	0.04	1	0.010
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16. Abstract (Limit: 200 words) A trans-Indian Ocean hydrographic section employing CTD/O ₂ profilers was conducted between Africa and Australia during austral spring 1987. The cruise track ranged between 29°S and 34°S; the average latitude of the crossing was 32°S. The purpose of the cruise was to explore various aspects of the South Indian Ocean including the characteristics of the core water masses of this ocean, the strength of the subtropical gyre, the structure and transport of deep western-boundary currents, and the net meridional heat flux. A total of 109 CTD/O ₂ profiles with associated rosette water sample measurements and 347 XBT profiles were collected, supplemented by underway upper ocean velocity, bathymetric and sea surface temperature and salinity data. This report details the data collection, calibration, and reduction methods, and summarizes the hydrographic observations.			
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